CURRENT FILING DATE:

2002-12-06

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; LENGTH: 177
; TYPE: PRT
; ORGANISM: human
US-10-202-062-40
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US-10-202-062-40
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; ORGANISM: human
US-10-310-793-44
                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 40, Application US/10202062
Publication No. US20040038349A1
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Best Local :
                                                                 Matches
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LENGTH: 177
                                                                                Query Match
Best Local :
                                                                                                                                                                                                                   SEQ ID NO 40
                                                                                                                                                                                                                                                              APPLICANT: Human Genome Sciences, Inc.,
TITLE OF INVENTION: Heteromultimeric TNF Ligand Family members
FILE REFERENCE: PF559
CURRENT SPLICATION NUMBER: US/10/202,062
CURRENT FILING DATE: 2002-07-25
FRIOR APPLICATION NUMBER: 60/307,838
PRIOR PILING DATE: 2001-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Remaining Prior Application data removed --
NUMBER OF SEQ ID NOS: 71
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SOFTWARE: PatentIn version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 2000-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/180,908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 09/559,290 FILING DATE: 2000-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE: 2000-07-07
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APPLICATION NUMBER: 60/314,381
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MCLSHLENMPLSHSRTQGAQRSSWKLMLFCSIVMLLELCSFSWLIFIFLQLETAKEPCMA 60
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                                                         100.0%; Score 951; DB 15; ilarity 100.0%; Pred. No. 2e-92; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Yu, Guo-Liang
APPLICANT: Ni, Jian
APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Human Endokine Alpha
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
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                 129 NKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
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20005-3934
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US20020099198A1
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amino acid
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NKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
                                                                    WQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLT 120
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1100 NEW YORK AVE.,
                                                                                                                                                                                                                                                                                                                                                                                                                     202-371-2540
                                                                                                                                                                                                              95.3%; Score 906; DB 9; llarity 100.0%; Pred. No. 1.1e-87; Conservative 0; Mismatches 0;
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NW, SUITE 600
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RESULT 8

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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.5
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951
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1: pir1:*
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Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                               777777888888888888
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T18979
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hypothetical pro
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probable peptide
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G protein alpha
CD40 receptor-a
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           CD40 receptor-
protein T2E6.1
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73.5 73.5 73 73 73 73 73 72.5 72.5 72.5 72.7 72.7 72.7 72.7 72.7	73.5
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609 166 326 326 1274 442 1513 1447 447 447 486 545	504
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A43458 JC7937 S12723 S12723 VGXR2S VGXR3S 140813 146209 T18917 C84727 D75207 AD2474 S32223 F35965 S46151 T15200	T47446
replication packet transcription acti interferon gamma p glycoprotein VP7 p glycoprotein VP7 p plycoprotein VP7 p neurotoxin type F hypothetical prote hypothetical prote probable glucan sy hypothetical prote hypothetical prote penicillin-binding penicillin-binding probable purine nu hypothetical prote	hypothetical prote

ALIGNMENTS

protein with 5'-3' exonuclease domain (Kem-1 family) PFB0205c - malaria parasite (P. C;Deceies: Plasmodium falciparum C;Deceies: Plasmodium falciparum C;Date: 13-Nov-1998 #sequence_revision 13-Nov-1998 #text_change 09-Jul-2004 C;Accession: A71621 R;Gardner, M.J.; Tettelin, H.; Carucci, D.J.; Cummings, L.M.; Aravind, L.; Koonin, I.; Pertea, M.; Salzberg, S.; Zhou, L.; Sutton, G.G.; Clayton, R.; White, O.; Smith, Pertea, M.; Salzberg, S.; Zhou, L.; Sutton, G.G.; Clayton, R.; White, O.; Smith, Science 28, 1126-1132, 1998 A;Title: Chromosome 2 sequence of the human malaria parasite Plasmodium falciparum. A;Reference number: A71600; MUID:99021743; PMID:9804551 A;Accession: A71621

(Plasmo

E.V.

מם	RESULT T18979	T18979 hypoth C;Spec C;Date	C;Acce	R;Percy, C. submitted t	A;Refe	A;Acce A;Stat	A; Mole	A;Resi	A; Cross-references: UNIPROT:Q17701	W.CTOR
112 INNTY 116	2 stical protein C06B3.2 - Caenorhabditis elegans	1718979 hypothetical protein C06B3.2 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004 C;Date: 15-Oct-1999	C;Accession: T18979	R;Percy, C. submitted to the EMBL Data Library, July 1996	A;Reference number: Z19056	A;Accession: T18979 A;Status: preliminary; translated from GB/EMBL/DDBJ		ule type: DNA	A; Residues: 1-665 <wil></wil>	A;Molecule type: DNA A;Residues: 1-665 <wil> A;Residues: 1-665 <wil></wil></wil>

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hexosephosphate
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                                         RESULT 4
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A; Introns: 23/1; ;
A; Note: F2K13_50
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A;Experimental source: cultivar Columbia; BAC clone
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T51545
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Sato, S.; Nakamura, Y.; Kaneko, submitted to the Protein Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           receptor protein kinase-like protein - Arabidopsis thaliana N;Alternate names: protein F2K13 50 C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 18-Aug-2000 #sequence_revision 18-Aug-2000 #text_chc;Accession: T51545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Residues:
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A;Introns: 29/3; 91/1; 139/3; 205/2; 240/1; 296/1; 337/3; 390/1; 419/3; 483/2; 556/2; C;Superfamily: Caenorhabditis elegans hypothetical protein F09B9.1
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A;Gene: CESP:C06B3.2
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Best Local :
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                                                                                                                                                                                                 63 QKNLEAVHIKEYLELRYFEDGLRNCYTLDVLQNRRYMIKAVEVYGNY---DGYNDYESED
                                                                                                                                                                                                                                                                                            43 WIIFIFIQLETAKEPCMAKFGPLPSKWQMASSEPPCVNKV---
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                                                                                                                                                                                                                                                            7 YLFFIFAIIHYVQ----ÀQQGFISLDCGLPSNEPPYIEPVTGLVFSSDADHIPSGISGRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120 NKDMIQTL---TN----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1-851 <SAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56 SSIEQFTAASSDCLFFKNCTASILNILKDNIYAIQQYDAFAKIPSAGLLEVSLVFDGSYQ 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27 WIĘCSIVMILEICSESWIIFIFIQUETAKEPCMAKĘGPIPSKWOMASSEPPCVNKVSDW-
                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                 KNNTY 164
                                                                                                                                              LYLGPNKWVRVDLEGK-
                                                                                                                                                                      VRLYKNKDMIQTLTNKSKIQNVGGTYE--LHV-----
                                                                                      RNDTY 179
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    transport protein uhpT
                                                                                                                                                                                                                                                                                                                               Conservative
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7 22.2%; Pred
7 25;
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Sequence Database,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21.2%;
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21.2%; Pred. No. 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----KLEILQNGLYLI--YGQVA--PNANYNDVAPFEVRLYK 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24; Mismatches
                                                                                                                                                                                                                                                                                                                                           Score 79.5;
Pred. No. 22;
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                                                                                                                                      VNGSVEEIIHIPSSNSLQICLVKTGNSLPFISALELRLL 174
                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                            --WKLEILQNGLYLI----YGQVAPNANYNDVAPFE 114
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    Mycoplasma
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August 2000
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   pneumoniae
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                                                                                                                                                                                                                                                                                                                                                       Length 851;
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                                                                                                                                                                    GDTIDLIFNSEHQVL
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ATCC
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C;Superfamily: oligopeptide permease protein oppB
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Nature 406, 477-483, 2000
                                                                                                                                                                                                                                                                                                                                               A;Cross-references: UNIPROT:Q9KM00; GB:AE004389; GB:AE003853; NID:g9657989; PIDN:AAF9649]
                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae A;Reference number: A82035; MUID:20406833; PMID:10952301
A;Accession: D82442
                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: DNA
A;Residues: 1-352 <HEI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probable peptide ABC transporter, permease protein VCA0589 [imported] - Vibrio cholerae C;Species: Vibrio cholerae C;Pate: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004 C;Accession: D82442
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A;Genetic code: SGC3
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C;Species: Mycoplasma pneumoniae
A;Variety: ATCC 29342
C;Date: 26-Feb-1997 #sequence_revision 25-Apr-1997 #text_change 09-Jul-2004
C;Accession: S73405
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A; Residues: 1-564 < HIM>
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A;Status: preliminary; nucleic acid sequence not shown; translation
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A;Title: Complete sequence analysis of the genome of the bacterium Mycoplasma pneumoniae
A;Reference number: S73327; MUID:97105885; PMID:8948633
                                                                                                                                                                                          Matches
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Best Local :
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Best Local Similarity
Matches 33; Conserv
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                                                                                                                            10 PLSH---SRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLP 66
           61 GAWYM-
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                                       SKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPPEVRLYKNKDMI 124
                                                                                PLTEARWARPKANRRGFWSLWIF----LLLFVVS-----LRABLIANDKPLLIQY---D 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ---VKDGVKTL---KPLEGAGGYF 357
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                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                     8.1%; Score 77.5;
26.3%; Pred. No. 12;
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22.9%; Pred. No.
tive 22; Mismatc
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19;
-GEFDTEADYTD--PYVVSLIEEKGQI 101
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lers, P
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RESULT

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glycoprotein VP7 precursor - human rotavirus A (serotype 2 strain DS1)
N,Alternate names: outer capsid protein VP7
C;Species: human rotavirus A
C;Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 09-Jul-2004
C;Accession: E27620
R;Green, K.Y.; Midthun, K.; Gorziglia, M.; Hoshino, Y.; Kapikian, A.Z.; Chanock, R.M.;
Virology 161, 153-159, 1987
A;Title: Comparison of the amino acid sequences of the major neutralization protein of A;Accession: E27620
A;Accession: E27620
A;Accession: E27620
A;Molecule type: genomic RNA
A;Residues: 1-326 <GRE>
A;Genetics:
UNIPROT:P11850
C;Genetics:
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Eur. J. Biochem. 157, 77-81, 1986
A;Title: Nucleotide sequence of the ARGRII regulatory gene A;Reference number: A25064; MUID:86220196; PMID:3709534
A;Moleonia F.
                                                                                            A;Map position: segment 9
;Superfamily: rotavirus glycoprotein VP7
C;Keywords: coat protein; glycoprotein; transmembrane protein
E;1-23/Domain: signal sequence #status predicted <SIG>
E;24-236/Product: glycoprotein VP7 #status predicted <GPV>
E;32-48/Region: hydrophobic #status predicted
E;69,146,238/Binding site: carbohydrate (Asn) (covalent) #stat
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VGXRDS
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A;Map position: 13L
C;Superfamily: GAL4 zinc binuclear cluster homology
C;Keywords: DNA binding; nucleus
F;16-53/Domain: GAL4 zinc binuclear cluster homolog
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C; Genetics:
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N;Alternate names: protein YML099c
C;Species: Saccharomyces cerevisiae
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Cross-references: UNIPROT:P05085; EMBL:Z46660; NID:g575702; PIDN:CAA86638.1; R;Messenguy, F.; Dubois, E.; Descamps, F.
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C;Accession: S49627; A25064
                                                                                         11-23/Domain: signal sequence #status predicted <SIG;24-326/Product: glycoprotein VP7 #status predicted;32-48/Region: hydrophobic #status predicted;69,146,238/Binding site: carbohydrate (Asn) (covale
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;Molecule type: DNA
;Residues: 1-3,'f',5-128,130-131,'L',132-282,'V',284-344,'V',346-365,'Q',367-548,'A',5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IFSFLKLIQDSTALDKVRAKEIVILPSEEDDNYKPLDTSNATTSSSEPRVDVVQEGLFRE
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  Conservative
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                          22.8%;
                                              8.1%;
    29;
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                        Score 77; DB
Pred. No. 12;
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                                                                                            (covalent) #status
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    59;
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glycoprotein VP7 precursor - human rotavirus A N,Alternate names: outer capsid protein VP7 C;Species: human rotavirus A C,Date: 30-Jun-1989 #sequence revision 30-Jun-1989 C;Accession: G27620; A93520; Ā04134
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F;24-326/Product: glycoprotein VP7 #status predicted <GPV>
F;32-48/Region: hydrophobic #status predicted <GPV>
F;69,146,238/Binding site: carbohydrate (Asn) (covalent) #atata
R;Green, K.Y.; Midthun, K.; Gorzi
Virology 161, 153-159, 1987
A;Title: Comparison of the amino
A;Reference number: A27620; MUID:
                                                                                                                                                                   RESULT
VGXRHU
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A;Title: Comparison of the amino acid sequences of the major neutralization A;Reference number: A27620; MUID:88044489; PMID:2823458
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C; Keywords: coat
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A; Residues: 1-326 < GRE>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LWLFCSIVMLLFLC----SFSWLIFIFLQLETAKEPCMAK---
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22.8%;
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mmino acid sequences of the a
MUID:88044489; PMID:2823458
                                                         Gorziglia,
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                                                                                                                                                                                                                                                                                                                   LMRYDNTSELDASELADLILNE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 77; DF
Pred. No. 12;
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                                                     M.; Hoshino,
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                   the major neutralization
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                                                   Y.; Kapikian,
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                                                                                            09-Jul-2004
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                                                                                                                                                                                                                                                                                                                   W----LCNP
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                                                       A.Z.; Chanock,
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C; Superfamily: t
C; Keywords: glyc
F;19,20/Binding
F;81/Binding sit
F;145-177/Disuli
                                                                                                                                                                                                                                                                                                                                                                                                                                                            tumor necrosis factor alpha precursor - cat
C;Species: Felis silvestris catus (domestic cat)
C;Date: 21-Nov-1993 #sequence revision 10-Nov-19
C;Accession: S11688
R;McGraw, R.A.; Coffee, B.W.: Otto. C.M.: Treve
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A;Cross-references: GB:X00572; NID:g61680; PIDN:CAA25236.1;
A;Cross-references: serotype 2 strain Hu/Australia/5/7
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A; Molecule type: genomic RNA
A; Residues: 1-326 <GRE>
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Nucleic Acids Res. 12, 3973-3982, 1984
A;Title: Sequence homology between human and animal rotavirus serotype-specific glycopro
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                                                                                                                                                                                                                                                                                                                                                                                             A; Title: Gene sequence of feline tumor necrosis factor alpha A; Reference number: S11688; MUID:91016860; PMID:2216740
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Cross-references: UNIPROT: P04328
                                                                                                                                                                                                                                                      A; Introns: 62/3; 78/1; 94/1
                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:P19101; EMBL:X54000; NID:g1084; PIDN:CAA37948.1; PID:g29577
                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-233 < MCG>
                                                                                                                                                                                                                                                                                                                                                    A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                            A; Accession: S11688
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Map position: segment glycoprotein VP7
;Superfamily: rotavirus glycoprotein; transmembrane protein;
;Keywords: coat protein; glycoprotein; transmembrane protein;
;Keywords: coat protein geomence #status predicted <SIG>_____
                                                                                                                                                               Keywords: glycoprotein; lipoprotein; myristylation; transmembrane;19,20/Binding site: myristate (Lys) (covalent) #status predicted;81/Binding site: carbohydrate (Ser) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Molecule type: DNA
                                                                                                                                              ;145-177/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   69,146,238/Binding site: carbohydrate (Asn) (covalent) #status predicted;
                                                                Matches
                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                         Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26 LWLFCSIVMLLFLC----SFSWLIFIFLQLETAKEPCMAK---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42;
                       7
                                                              Similarity 50; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
ENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIF-----IFLQLETAKEPCMAK 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MDIS 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NPQLYCDYNVV----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QFIS 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        --RLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STŚGEPFLTSTLCLYYPAEAKNEIŚDDEWENTLSQLFLTKGWPIGSVYFKDYNDINTFSV 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LTILISIILLNYILKTITNTMDYIIFRFLLLIALISPFVRTQNYGMYLPITGSLDAVYTN
                                                                                                                                                                                                                              tumor necrosis factor
                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                  8.0%;
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22.8%;
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                                                              31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 strain HU5
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                                                                                    Score 76.5;
Pred. No. 9.
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Pred. No.
                                                                Mismatches
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                                                                               9.2;
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                                                              Indels 113;
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                                                                                                                                                                                                             protein
                                                              Gaps
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                                                                12;
      A; Cross-references:
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RESULT 12
E70125
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hypothetical protein yjbB [imported] - Lactococcus lactis subsp. lactis (strain C;Species: Lactococcus lactis subsp. lactis
C;Species: 23-Mar-2001 #sequence_revision 23-Mar-2001 #text_change 09-Jul-2004
C;Accession: A86736
                                                                                                                                                                                                                                      hypothetical protein BB0205 - Lyme disease spirochete (;Species: Borrelia burgdorferi (Lyme disease spirochete) (;Species: Borrelia burgdorferi (Lyme disease spirochete) (;Date: 13-Feb-1998 #sequence_revision 13-Feb-1998 #text_change 09-Jul-2004 (;Date: 13-Feb-1998 #sequence_revision 13-Feb-1998 #text_change 09-Jul-2004 (;Accession: E70125
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A; Molecule type: DNA
A; Residues: 1-525 < KLE>
                                                                    A;Reference number: A;Accession: E70125
                                                                                      A;Authors: Smith, H.O.; Venter, J.C.
A;Title: Genomic sequence of a Lyme disease spirochaete,
A;Reference number: A70100; MUID:98065943; PMID:9403685
                                                                                                                                                                           son, D.; Peterson, J.;
; Bowman, C.; Garland,
                                                                                                                                                                                                                R; Fraser,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-209 <5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Title: The complete genome sequence of the lactic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Bolotin, A.; Wincker, P.; Mauger, Genome Res. 11, 731-753, 2001
                                            A;Status: preliminary; nucleic acid sequence
                                                                                                                                                    Nature 390,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Experimental source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                      C.M.; Casjens, S.; Huang, W.M.; Sutton, G.G.; Clayton, R.; La
Peterson, J.; Kerlavage, A.R.; Quackenbush, J.; Salzberg, S.;
C.; Garland, S.; Fujli, C.; Cotton, M.D.; Horst, K.; Roberts,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             163
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     113 FEVRLYK---NKDMIQTLTNKSKI---QNVGGTYELHVGDTIDLJFNSEHQVLKNN 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            53
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                                                                                                                                                    580-586, 1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                 LDDVTFKPSGNSLSIKKMTGNTKIIVPEDVGVSLDLTTNAGLVKIFNEAAQINAGN 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EALPKKAGGPQGSGR---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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21.0%;
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Pred. No.
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                                              not shown; translation
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                                                                                                                 Borrelia burgdorferi
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                                                                                                                                                                             ; Lathigra, R.;
S.; Hanson, M.;
rts, K.; Hatch,
                                                   not
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UNIPROT:051223; GB:AE001131; GB:AE000783; NID:g2688098; PIDN:AAC66601

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MADS-box protein (C;Species: Picea (C;Date: 14-Jul-19)
C;Accession: T148
RESULT 14
IT 0811
IT 0811
IT 0811
MHC class I protein, alpha 1, alpha 2, alpha 3 and trans (;Species: Latimeria chalumnae (coelacanth)
C;Pate: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text C;Pate: 13-Sep-1996 #sequence_revision 150811
C;Accession: IS0811
R;Betz, U.A.K.; Mayer, W.E.; Klein, U.
Proc. Natl. Acad. Sci. U.S.A. 91, 11065-11069, 1994
A;Title: Major histocompatibility complex class I genes A;Reference number: IS0810; MUID:95062206; PMID:7972010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary
A;Molecule type: DNA
A;Residues: 92-156 <TA2>
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A; Residues: 1-222 < TAN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Tandre, K.; Albert, V.A.; Sundas, A.; Engstroem, Plant Mol. Biol. 27, 69-78, 1995
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Superfamily: transcription factor squa; serum response factor DNA-binding Keywords: DNA binding; transcription regulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Cross-references: UNIPROT:Q40766; Experimental source: female cone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;Status: preliminary; translated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADS-box protein dal2 - Norway spruce Species: Picea abies (Norway spruce) Date: 14-Jul-1995 #sequence_revision Accession: T14847; S51934
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                           ESNSQYWQQEAGK-
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Borrelia burgdorferi hypothetical protein BB0205
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                                                                                                       alpha 1, alpha 2, alpha 3 and transmembrane domains - chalumnae (coelacanth)
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Pred. No.
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Pred. No. 11;
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A;Accession: I50811
A;Status: preliminary; ti
A;Molecule type: DNA
A;Residues: I-314 <BET>
A;Cross-references: UNIPF
C;Genetics:
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A; Residues: 1-686 <WIL>
A; Cross-references: UNIPROT:019467;
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             Search completed: November
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A; Introns: 9/1;
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C;Superfamily: class I histocompatibility
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                                                     DELLEMKERLSSTETMVVTLTK---
                                                                           -DVAPFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTY 164
                                                                                                        -PVSEPPKNMRKSNDTPLRIMKKSEYADYDEVAGISCSPISGIVPNSQANTLDESSSRVW 418
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49/1; 76/2; 100/2; 151/2; 212/3; 314/3; 380/2; 447/2;
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Pred. No. 41;
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score greater d. No. is the number of results predicted by chance to have a re greater than or equal to the score of the result being printed, is derived by analysis of the total score distribution.

SUMMARIES

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Aam41041 Human pol	Adq17815 Human sof	Adn38962 Cancer/an	Aae14753 Human WKL	Aae14752 Human WKL	Aam38998 Human pol	Aam70748 Human bon	Abg17426 Novel hum	Adc01858 Human End	Adall464 Human end	Aay53061 Human end	Aab08785 A human e	Aaw37847 Human end	Abw02285 Human end	Adc35222 Human TNF	Abp60544 Human tum	Abr42323 Human GIT	Aau81953 Human PRO	Aab50979 Human PRO	Aab47287 PRO175 po	Aab53065 Human ang	Aab20109 Human imm	Aab47056 PRO175. 5	Aay06646 Human PRO	Aay15817 Amino aci	Description

The present sequence represents a polypeptide designated DNA19355. The polypeptide is a tumour necrosis factor homologue. The DNA19355 polypucleotide sequence can be used to derive hybridisation probes for e.g. isolating similar sequences, gene mapping, genetic analysis, etc. Nucleic acids which encode DNA19355 can also be used to generate transgenic or knockout animals, which are useful in the development and screening of therapeutically useful reagents. The DNA19355 polypeptides may be used in diagnostic assays to detect the presence of the receptor GITR in mammalian tissues. The polypeptides can also be used as immunogens to raise antibodies. The polypeptides may also be used to

Claim 10; Fig 1; 86pp; English.

New DNA19355 polypeptide as tumour necrosis factor homolog

1128 3 8.5 1188 3 8.5 107 6 8.4 851 5 8.3 107 6 8.3 107 5 8.3 107 5 8.3 108 5 8.1 226 5 8.1 228 3 8.1 228 3 8.1 228 3 8.1 236 7 8.1 2763 2	8.6 1188 3 8.5 1162 4 8.5 107 6 8.4 851 5 8.3 1013 7 8.3 1013 7 8.3 1013 7 8.1 226 5 8.1 1226 5 8.1 228 3 8.1 228 3 8.1 228 3 8.1 236 7 8.1 2763 2
. 6 1188 3	.6 1188 AANIS18183 .5 162 4 AAU57900 .5 162 6 ABM54419 .5 107 6 ABM54418 .4 851 5 ABB93512 .4 879 5 ABB93512 .4 879 5 ABB93512 .4 879 5 ABB93512 .1 103 7 ADD50968 .3 1013 7 ADD50968 .3 103 7 ADD50968 .3 104 AAG62293 .1 226 5 ABB93970 .1 126 5 ABB93593 .1 3614 4 ABB63970 .1 183 3 AAG43533 .1 3614 5 AAC43533 .1 3614 5 AAC43533 .1 3616 1 AAC64761 .1 236 1 AAC64761 .1 2763 2 AAC410344 .0 1138 5 AAC21502
- W 4 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10	AABUSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
	AAB18183 AAB18183 AAB18183 AAB184419 ABM54419 ABM64618 ABB93512 ABB93512 ABB93519 ABB62280 ABBB3970 ABBB3970 ABB935593 AAG43533 AAG43533 AAG43533 AAG43532 AAG43531 AAF60547 AAF60547 AAF60547 AAF60547 AAG71536761 AABF60547 AAG71536761 AABF60547 AAG71536761 AABF60547 AAG71536761 AABF60547 AAG71536761 AABF60547 AAG71536761 AABF60547 AAG71536761
AAB18183 AAW57900 ABM54419 ABM64618 ABB93512 AAB2593 AAB2593 AAB62280 ABB83970 ABB83	
	AAU51913 AAU51918183 AAU57900 Abm54419 Abm64618 Abb93512 Abp35594 Ade09068 Ade09068 Ade09068 Ade09068 Ade09068 Ade09068 Ade0408 Ade0408 Aag43533 Aag43533 Aag43533 Aag43533 Aag43536 Aag435761 Aag4036761 Aag4036761 Aag4036761

ALIGNMENTS

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RESULT 1
AAY15817
DNA19355; tumour necrosis factor homologue; receptor GITR; immunogen; antibody; apoptosis; mammalian cancer cell; tumour necrosis factor (TNF)-alpha secretion; primary T- cell; proinflammatory response.
                                                                                                                                                                                                                                                                                                                         AAY15817;
                                                                                                                                                                                                                                                                                                                                     AAY15817 standard; protein;
                                                                                                                   WPI; 1999-338009/28.
                                                                                                                                 Ashkenazi AJ,
Godowski PJ,
                                                                                                                                                                     18-NOV-1997;
12-DEC-1997;
                                                                                                                                                                                           18-NOV-1998;
                                                                                                                                                                                                          27-MAY-1999.
                                                                                                                                                                                                                         WO9925834-A1
                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                           Amino acid sequence of human DNA19355 polypeptide
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                                                                                                                                                       (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                 Gurney AL,
Mark MR;
                                                                                                                                                                     97US-0065635P.
97US-0069661P.
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                                                                                                                                         Pitti
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                                                                                                                                          Baker KP;
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RESULT 2
AAYO6646
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XX PRO3
XX PRO3
XX PRO3
XX PRO3
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Best Local
                                                                                                                                          WPI; 199
N-PSDB;
                                                                  Tumor necrosis factor receptor homologue - useful for, e.g. modulating apoptosis and NF-KB activation and proinflammatory or autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             induce apoptosis in mammalian cancer cells. DNA19355 polypeptides stimulate secretion of tumour necrosis factor (TNF)-alpha in primary cells, and so can be used to stimulate a proinflammatory response in
                                                                                                                                                                                                               Ashkenazi AJ,
Goddard A;
                                                                                                                                                                                                                                                                                                                                   09-FEB-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inflammation;
                                                                                                                                            1999-494296/41.
DB; AAX87726.
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nilarity 100.0%;
Conservative
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                                                                                                                                                                                                                                     Gurney AL,
                                                                                                                                                                                                                                                                                                                                   98US-0074087P
                                                                                                                                                                                                                                                                                                                                                                                  99WO-US002642.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "N-glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
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51
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "transmembrane domain"
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Pred. No. 4.7e-97;
Mismatches 0;
                                                                                                                                                                                                                                     SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  domain"
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                                                                                                                                                                                                                                        Pitti
                                                                                                                                                                                                                                        RM,
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Example 2; Fig 5A; 104pp; English

12-JUL-1999;

99US-0143304P

(GETH) GENENTECH INC

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RESULT 3
AAB47056
IID AAB47056
AC AAB4
XX AAB4
XX AAB4
XX PROJ
XX AGE
X
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRO364; human; glucocorticoid-induced tumor necrosis factor; recept hGITR; ligand; hGITRL; PRO175; tumour necrosis factor receptor; TNI human umbilical vein endothelial cell; HUVEC; cardiac hypertrophy; myocardial infarction; PGF_2alpha; trauma; cancer; angiogenesis; age-related macular degeneration; antibody; periodontal disease; vascular-related drug targeting; atherosclerosis; hypertension; inflammatory vasculitides; Reynaud's disease; aneurysm;
                                                                                                                                                                                                                                                                                                                                         Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Region
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                                                                                                                                          11-JUL-2000;
                                                                                                                                                                                                  18-JAN-2001
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                                                                                                                                             2000WO-US018867.
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161
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129
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ce= "Transmembrane region"
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100.0%; I
ative 0;
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Pred. No. 4.7e-97;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antagonists, are useful for vascular-related drug targeting or as therapeutic targets for the treatment or prevention of atherosclerosis, hypertension, inflammatory vasculitides, Reynaud's disease, aneurysms, arterial restenosis, thrombophlebitis, tumor angiogenesis, gut protection or regeneration and treatment of lung or liver fibrosis, periodontal diseases, attraction of bone-forming cells, central and peripheral nervous system disease and neuropathies and rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents PRO175 polypeptide, which is a human gluco-corticoid-induced tumor necrosis factor ligand (hgITRI). The corresponding receptor (hgITR), PRO364, is given in AAB47054. PRO364 and PRO175 may be used in a mixture with a cardiovascular, endothelial, angiogenic or angiostatic agent for the treatment of a cardiovascular, endothelial, angiogenic or angiostatic disorder. The PRO364 sequence was endothelial, angiogenic or angiostatic disorder. The PRO364 sequence was endothelial, angiogenic or angiostatic disorder. The PRO364 sequence was endothelial, angiogenic or angiostatic disorder. The PRO364 sequence was endothelial, angiogenic or angiostatic disorder.
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                                                                                                                           antiarthritic; antiinflammatory; antianaemic; immunosuppressive;
antithyroid; antidiabetic; neuroprotective; hepatotropic; viruci
dermatological; antipsoriatic; antiasthmatic; antiallergic;
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                                                                                                                                                                                                                                   immune disease; autoimmune disease; antirheumatic;
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Pred. No. 4.7e-97;
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Query Match Best Local Similarity

100.0%;

Score Pred.

951; DB 4; No. 4.7e-97,

Length 177;

Sequence 177

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cc arthritis, spondyloarthropathy, systemic sclerosis, idiopathic chronic crifical arthritis, spondyloarthropathy, systemic sclerosis, idiopathic crifical inflammatory myopathy, Sjogren's syndrome, systemic vasculitis, considered in a sutoimmune thrombocytopaenia, comprise detecting the level of expression of the pRO gene. Also claimed comprise detecting the level of expression of the pRO gene. Also claimed considered in a compound canable of inhibiting the
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Gurney AL, n.
                                                                                                                                                                                                                                                                                                                                                                                                           into a tissue of a mammal, stimulating or enhancing an immune response in a mammal, or increasing the proliferation of T-lymphocytes in a mammal in response to an antigen. Claimed compositions comprising the PRO polypeptide or its antagonist have the opposite effect. A claimed method for treating an immune related disorder, such as a T cell disorder, involves administering the PRO polypeptide, an agonist antibody or an antagonist antibody. The disorder is selected from systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis, juvenile chronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (see AAF30050-62) encoding novel human PRO proteins (see AAB20108-20) including PRO175. Claimed compositions comprising these proteins or the agonists are useful for increasing infiltration of inflammatory cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New PRO polypeptides, nucleic acids and (ant)agonists, diagnosing and treating immune-related disorders, such sclerosis, rheumatoid arthritis and diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is that of PRO175 (UNQ149), a novel human immunomodulator protein (20 kDa, pI 8.08) showing homology to tumour necrosis factor family members. The invention provides polympletides
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                                                       are a method of identifying a compound capable of inhibiting the expression or activity of the PRO polypeptide, vectors, host cells, antibodies, and a method of stimulating an immune response in a mam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 20; Fig 4; 127pp; English.
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Hillan KJ, M
K, Wood WI;
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45. .17
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08-SEP-1999;
15-SEP-1999;
15-SEP-1999;
05-OCT-1999;
                                 New isolated nucleic acid for producing a PRO polypeptide, analyzing genetic disorders and treating cardiovascular, endothelial or angiogenic disorders, such as atherosclerosis, wounds or cancer.
                                                                                                              Ashkenazi AJ, Baker KP, Ferra
Godowski PJ, Gurney AL, Hilla
Pirti RM, Watanabe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cardiac hypertrophy; cardiovascular disorder; endothelial disorder; angiogenic disorder, atherosclerosis; osteoporosis; hypertension; myocardial infarction; diabetic retinopathy; rheumatoid arthritis; Crohn's disease; psoriasis; endometriosis; ulcer; wound healing; cancer; Alzheimer's disease; Huntington's disease; stroke; drug screening;
                                                                                                                                                                                                              30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; angiogenesis-associated protein; PRO; endothelial cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB53065;
                                                                                                                                                                                                                                                                                                 26-JUL-1999
                                                                                                                                                                                                                                                                                                             20-JUL-1999
                                                                                                                                                                                                                                                                                                                        23-JUN-1999
                                                                                                                                                                                                                                                                                                                                  02-JUN-1999
                                                                                                                                                                                                                                                                                                                                                14-MAY-1999
                                                                                                                                                                                                                                                                                                                                                          12-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                       08-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                              05-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200053753-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human angiogenesis-associated protein PRO175, SEQ ID NO:9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB53065
                                                                                                                                                                (GETH )
                                                                                 2001-090793/10.
DB; AAC97374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         therapy; transgenic animal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
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                                                                                                         r. Pitti
                                                                                                                                                                GENENTECH INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS 177
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                                                                                                                                                                                                                                                                                                                                                                                              2000WO-US000219
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                                                                                                                                                                                     99WO-US021090
99WO-US021547
99WO-US023089
99WO-US028813
99WO-US028409
99WO-US028564
99WO-US028565
                                                                                                                                                                                                                                                                                                 -Sn66
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99WO-US020594.
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99US-0123957P
                                                                                                                                                                                                                                                                                                                                                -Sn66
                                atherosclerosis,
                                                                                                                                                                                                                                                                                                 -0145698P.
                                                                                                                                                                                                                                                                                                             -0144758P.
                                                                                                                                                                                                                                                                                                                                                -0134287P.
                                                                                                                                                                                                                                                                                                                        0141037P.
                                                                                                                 Ferrara N, Gerber H,
Hillan KJ, Kuo SS, M;
anabe CK, Williams PM,
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                                wounds or cancer.
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                                                                                                                             Mark MR,
                                                                                                                                       Goddard
                                                                                                                  Wood WI;
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                                                                                                                             Marsters SA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             growth;
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Claim 69; Fig

4; 293pp; English

Peptide

Location/Qualifiers

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RESULT 6
AAB47287
IID AAB47
XX
AAB47287
AC AAB4
XX
AC AAB4
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PRO1
DE PRO1
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PRO1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cell growth, cardiac hypertrophy or PRO-induced angiogenesis via the cardiac hypertrophy or PRO-induced angiogenesis via the cardiac hypertrophy or an agonist or antagonist thereof. PRO mucleic acids, PRO proteins, antibodies against PRO proteins, PRO cardiavascular, endothelial or angiogenic disorders, such as cardiavascular, endothelial or angiogenic disorders, such as cardiavascular, endothelial or angiogenic disorders, such as cardiavascular, retunopathy, rheumatoid arthritis, Crohn's disease, psoriasis, condetriosis, ulcers, wounds, cancer, Alzheimer's disease, FRO mucleic acids are additionally useful in the recombinant production of PRO proteins, as hybridiastion probes to screen libraries to isolate cDNAs with sequence identity to PRO proteins, to map genes encoding PRO proteins, to analyse genetic disorders, and in gene therapy. PRO nucleic acids can also be used to produce transgenic animals useful for the development and screening of potential therapeutic agents. The present sequence represents a PRO protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
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                                                                                                                                                                           PRO; type II transmembrane protein; tumour necrosis factor; stroke; heart hypertrophy; cardiovascular; endothelial; angiogenic; disorder; myocardial infarction; cardiac hypertrophy; PGF Zalpha; trauma; bone; cancer; age-related macular degeneration; wound; burn; hypertension; diabetes mellitus; osteoporosis; ischaemia; atherosclerosis; psoriasis rheumatoid arthritis; Crohn's disease; amylotrophic lateral sclerosis; endometriosis; angina; neoplasms; periodontal disease; cartilage; TNF; Alzheimer's disease; Parkinson's disease; Huntington's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB47287;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB47287 standard; protein; 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 177 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression or activity; diagnosing a cardiovascular, endothelial or angiogenic disorder, or a susceptibility to such a disorder by detecting mutations in a PRO gene, or the expression level of a PRO gene within a particular tissue; treating a cardiovascular, endothelial or angiogenic disorder via the administration of a PRO protein, PRO nucleic acid, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to novel human angiogenesis-associated proteins designated PRO proteins (AAB53064-B53097), and to nucleic acids encode PRO proteins. The invention also relates to vectors and host cells comprising a PRO nucleic acid, the recombinant production of a PRO
                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRO175 polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRO agonist or antagonist; a retroviral gene therapy vector comprising a PRO nucleic acid; and methods of inhibiting or stimulating endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           additionally encompasses methods of identifying modulators of PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  comprising a PRO protein, accompounds which inhibit the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN
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Pred. No. 4.7e-97;
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                                                                                                                                                                                                                                                                                               psoriasis;
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Best Local
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24-FEB-2000;
15-MAR-2000;
30-MAR-2000;
17-MAY-2000;
30-MAY-2000;
                                                                                                                                                                                                                                     The sequences given in AAB47287-90 show PRO polypeptides. PRO175 shows type II transmembrane protein typology, and portions of PRO364 show homology to members of the tumour necrosis factor (TNNP) family, thereby indicating that it may be a novel member of the TNF family. PRO175 and PRO185 stimulated heart hypertrophy. PRO GIMA's may be used to identify a compound that inhibits PRO, diagnosing a cardio- vascular, endothelial or angiogenic disorder in a mammal by detecting PRO cDNA, treating cardiovascular, endothelial or inhibiting endothelial cell growth or angiogenesis in a mammal. The mammal is a human which has suffered angiogenesis in a mammal. The mammal is a human which has suffered
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ashkenazi A
Hillan KJ,
                                                                                                                                           myocardial infarction, cardiac hypertrophy characterized by the presence of elevated PGF 2alpha, trauma, cancer or age-related macular degeneration. Trauma includes wounds or burns. Other trastable diseases include diabetes mellitus, osteoporosis, ischaemia, hyper-tension, rheumatoid arthritis, Crohn's disease, atherosclerosis, psoriasis, endometriosis, angina, neoplasms, periodontal disease, bone and cartilac repair, Alzheimer's disease, Parkinson's disease, Huntington's disease,
                                                                                                                                                                                                                                                                                                                                                                                                              cardiovascular, endothelial or an mellitus, myocardial infarction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-NOV-1999;
30-NOV-1999;
                                                                                                      Sequence
                                                                                                                                amylotrophic lateral
                                                                                                                                                                                                                                                                                                                                                                                          Claim
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                                                                                                                                                                                                                                                                                                                                                                                      56; Fig 2; 144pp; English.
                                                 al Similarity
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                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                PRO polypeptide useful scular, endothelial or a
              MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWL1F1FLQLETAKEPCMA
	exttt{MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA}
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; 2000WO-US000219
; 2000WO-US005004
; 2000WO-US006884
; 2000WO-US008439
; 2000WO-US013705
; 2000WO-US013701
; 2000WO-US014941.
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                                                 100.0%; llarity 100.0%; Conservative 0
                                                                                                      ΑA;
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99WO-US028409.
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/label
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/label= Transmembrane
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161. .165
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INC
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                                                                                                                                sclerosis,
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sters SA, Paoni NF,
                                                                                                                                                                                                                                                                                                                                                                                                                  eful in treating and dia
or angiogenic disorder
tion, arthritis.
                                                 0;
                                               Score 951; DB 4;
Pred. No. 4.7e-97;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRO175
                                                                                                                                 and stroke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            glycosylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Godowski PJ, (
aoni NF, Pitti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            site
                                                                                                                                                                                                                                                                                                                                                                                                                             l diagnosing
der e.g. can
                                                                         Length 177;
                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gurney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wood
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                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WI;
                                                 Gaps
                                                                                                                                                         cartilage
                                                                                                                                                                                                                                                                                                                                                                                                                                diabetes
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ARBSULT 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JUL-1999;
01-SEP-1999;
30-NOV-1999;
30-NOV-1999;
02-DEC-1999;
16-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JAN-2000;
06-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PRO; cardiant; antianglogenic; antiarteriosclerotic; hvasotropic; antirheumatic; antiarthritic; antiinflammatory; cvulnerary; antianglinal; gene therapy; cardiovascular disease; endothelial disorder; angiogenic disorder; cancer; periodonta
                                                                                                                                                                                                                                                                                                                             Ashkenazi AJ, Baker
Goddard A, Godowski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-MAR-2000;
10-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-2000;
24-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-FEB-2000;
18-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUL-1999;
26-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-JUN-1999;
23-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-DEC-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB50979;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB50979 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        healing.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN 120
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2000WO-US000319
2000WO-US0003565
2000WO-US003565
2000WO-US004341
2000WO-US00504
2000WO-US00504
2000WO-US0050841
2000WO-US006319
2000WO-US006884
2000WO-US006884
2000WO-US008439
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99WO-US028313.
99WO-US028409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0146222P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0145698P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US012252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein;
                                                                                                                                                                                                                                                                                                                             걸쯗
                                                                                                                                                                                                                                                                                                  KP, Ferrara N,
PJ, Gurney AL,
Watanabe CK, W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                     , Gerber H, Gerritsen
, Kuo SS, Mark MR, Ma
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                periodontal disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypotensive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 177
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The present sequence is one of seventeen novel PRO polypeptides. nucleic acids, polypeptides, agonists and antagonists are useful treating cardiovascular, endothelial or angiogenic disorders in a

in a

mammal

The PRO

Seventeen nucleic acids diagnosis and treatment

encoding PRO polype of cardiovascular,

PRO polypeptides which are useful in ovascular, endothelial or angiogenic

and treatment in a mammal.

disorders

Claim

71; Fig 2; 182pp; English.

WPI; 2001-025251/03. N-PSDB; AAC90563.

Paoni NF,

Pitti RM,

Α,

Marsters

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RESULT 8
AAU81953
ID AAU8
XX
AAU8
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AAU8
AC Huma
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Huma
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Huma
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  18-FEB-2000;
22-FEB-2000;
24-FEB-2000;
02-MAR-2000;
15-MAR-2000;
17-MAY-2000;
                                                                                                                                                                                      30-NOV-1999;
01-DEC-1999;
05-JAN-2000;
06-JAN-2000;
11-FEB-2000;
                                                                                                                                                                                                                                                                                                                             15-SEP-1999;
29-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                   28-JUL-1999;
13-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; PRO; antiinflammatory; ophthalmological; vasotropic; retinal cell injury; ocular disease; retinitis pigmentosa; macular degeneration; retinal detachment; retinal tear; retinopathy; retinal degenerative disease; macular hole; degenerative myopia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Examples of these disorders include cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, Reynaud's disease, rheumatoid arthritis, angina, mycardial infarctions, thrombophlebitis and lymphangitis. The PRO polypeptides and antagonists are also used to prevent tumour angiogenesis and for treating periodontal diseases. They are also used to stimulate wound healing and tissue regeneration. The PRO nucleic acids, polypeptides and anti-PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-FEB-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200109327-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 systemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Purtscher's retinopathy; oedema; ischaemic condition; retinal vision occlusion; collagen vascular disease; thrombocytopaemic purpura; uveitis; retinal vasculitis; Eales
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        acute retinal necrosis syndrome; traumatic chorioretinopathy; Purischer's retinopathy; oedema; ischaemic condition;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antibodies are useful angiogenic disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
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177; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 lupus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN
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                                                                                                                              ; 2000WO-US000219.
; 2000WO-US000376.
; 2000WO-US003565.
; 2000WO-US004341.
; 2000WO-US004414.
2000WO-US005004.
2000WO-US005841.
2000WO-US006884.
2000WO-US008439.
2000WO-US013705.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US020710.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              erythematosus; environmental trauma.
                                                                                                                                                                                                                                                                        99WO-US028301.
                                                                                                                                                                                                                                                                                                       99WO-US028313.
                                                                                                                                                                                                                                                                                                                             99WO-US028214
                                                                                                                                                                                                                                                                                                                                                            99WO-US021090.
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99WO-US020944.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 951; DB 4;
Pred. No. 4.7e-97;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease
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RESULT 9
ABR42323
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cc encoding the PRO proteins, a vector comprising the nucleic acid, a host call comprising the vector, and anti-PRO antibody. The PRO proteins are useful for promoting survival of retinal cells (retinal neurons such as cretinal ganglion cells, displaced retinal ganglion cells, amacrine cells, displaced retinal ganglion cells, amacrine cells, or promoting to the protein to the protein such as continuous cells, or or cells, or cells used as Muller cells or pigment cells, or delaying or preventing retinal cell injury or death continuous cells, or delaying or preventing retinal cell injury or death continuous cells, or delaying or preventing the retinal cell injury or death continuous macular degeneration, retinal detachment, retinal tear, continuous cells, retinal detachment, retinal tear, continuous cells, acute retinal degenerative disease, macular hole, degenerative contusion, purtscher's retinopathy, cedema, an ischaemic condition, contusion, purtscher's retinopathy, cedema, an ischaemic condition, contusion, contusion, contusion, contusion, contusion, contusion, contusion, collasion occlusion associated with Eales disease or systemic lupus erythematosus), retinal conjury or environmental trauma. The retinal cell injury or death is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to promoting the survival of retinal cells, or delaying or preventing retinal cell injury or death, by contacting the retinal cells with the polypeptide such as PRO175, PRO230, PRO216, PRO243, PRO316, PRO322, PRO323, PRO943, PRO828, PRO826, PRO243, PRO3132 polypeptide. Also included are the nucleic acids.
                                      immunomodulator;
                                                          Human; GITRL; tumour necrosis factor;
                                                                                                   Human GITRL
                                                                                                                                            11-AUG-2003
                                                                                                                                                                                                                       ABR42323 standard; protein; 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Promoting survival of retinal cells, or delaying or preventing retinal cell injury or death, by contacting retinal cells with PRO175, 220, 216, 243, 306, 346, 322, 536, 943, 840, 828, 826, 1068 or PRO1132 polypeptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      delayed or prevented by substantially not causing angiogenesis or mitogenesis. The present sequence represents a PRO protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 44; Fig 2; 152pp; English
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Wood WI;
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                                                                                                protein.
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Lafleur M,
                                                                                                                                         (first
                                    osteopathic
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100.0%;
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Mark MR, Marsters SA, Pitti RM, Wa
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Pred. No. 4.7e-97;
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                                                          ligand; cytostatic;
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Best Local S
Matches 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to compositions comprising heterotrimeric of tumour necrosis factor (TNF) ligand family members, and their the detection, prevention and treatment of disease. In preferred embodiments, the heterotrimeric complex comprises full-length or extracellular portions of GITRL together with full-length or extracellular portions of other TNF ligand family members. The
             antipsoriatic; anti-HIV; antiarteriosclerotic; vasotropic; thyromimetic; haemostatic; cancer; autoimmune disease; graft versus host disease; GVHD; inflammatory disorder; proliferative disorder; single chain antibody; antibody; human; tumour necrosis factor; endokine-alpha.
                                                                        dermatological; immunosuppressive; antiinflammatory; antirheumatic; antiarthritic; cytostatic; antianaemic; antiallergic; antiasthmatic; neuroprotective; ophthalmological; tuberculostatic; antidiabetic;
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The invention
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                                                                                                                                                               Human tumour necrosis factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            heterotrimeric complexes of the invention are useful for treating autoimmune disease, cancer or osteoporosis, and particularly for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                                              ABP60544
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-JUL-2001; 2001US-0307838P
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                                                                                                                                                                                                                                                              standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA:
                                                                                                                             immunospecific; tumour necrosis factor delta;
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                                                                                                                                                             endokine-alpha.
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Pred. No. 4.7e-97;
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different
porosis or
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Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             host disease (GVHD). The autoimmune disease is systemic lupus erythematosus, rheumatoid arthritis or Sjogren's syndrome. The antibody is useful for detecting, diagnosing, prognosing, treating, preventing or suseful for detecting, diagnosing, specially, treating a disease or disorder associated with aberrant APRIL or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a novel antibody or its fragment, which immunospecifically binds tumour necrosis factor Delta (TWF-delta/APRIL). The antibody of the invention has dermatological, immunosuppressive, antiinflammatory, antirheumic, antiarthritic, cytostatic, antianaemic, antiallergic, antiasthmatic, neuroprotective, ophthalmological, tuberculostatic, antidiabetic, antipsoriatic, anti-HIV,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infectious diseases (e.g. acquired immunodeficiency syndrome (AIDS)), proliferative disorders (e.g. leukemia). The present sequence represe the tumour necrosis factor endokine-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   factor delta, useful for treating, preventing or ameliorating Non-Hodgkin's lymphoma, multiple myeloma, rheumatoid arthritis or Sjogren's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gravis, Hashimoto's disease, immunodeficiency syndrome, Bruton'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ameliorating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiarteriosclerotic, vasotropic, thyromimetic, and haemostatic activity. The antibody or its fragment are useful for treating, preventing or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 214-215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isolated antibody that immunospecifically binds tumor necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-156740/15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rating cancer such as Non-Hodgkin's lymphoma or multiple my disease or disorder such as autoimmune disease, and graft
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                                                                                                                                                                                                                                                          KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN
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No. 4.7e-97;
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ADC35222 ADC35222

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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tumour necrosis factor family ligand. A composition comprising the isolated antibody or its fragment is used for treating an individual in need of decreased level of endokine alpha activity. The endokine alpha polypeptide present in a heterotrimeric complex is used for treating an individual having a disorder associated with excessive bone resorption, e.g. osteoporosis, Paget's disease or arterial calcification. Treating an individual having a disorder associated with insufficient bone resorption comprises administering an endokine alpha antagonist, which is the antibody that binds specifically to endokine alpha polypeptide. The present sequence represents the amino acid sequence of a tumour necrosis
                          ABW02285;
                                                                        ABW02285 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New Endokine alpha gene useful for preparing a composition for treating disease associated with excessive or insufficient bone resorption e.g., osteoporosis, Paget's disease or arterial calcification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human; tumour necrosis factor; TNF ligand; endokine alpha; excessive bone resorption disorder; osteoporosis; Paget's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated nucleic acid molecule encoding a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 40; 145pp; English.
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30-OCT-2001;
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ROSEN C A.
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2001US-0330761P.
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                                                                   protein; 177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 951; DB 7;
100.0%; Pred. No. 4.7e-97;
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Best Local :
                                                                                                                                                                                                  method involves administering a composition comprising tumour necrosis factor (TNF)-gamma-beta and its receptors DR3 and TR6 to a person with, or suspected of having the disease or disorder. The antagonist of TNF-gamma-beta is useful for treating or ameliorating a gastrointestinal tract disease or disorder, specifically an inflammatory bowel disease, e.g. Cronn's disease or ulcerative colitis. The present sequence is human endokine alpha protein. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAR-2001;
06-JUL-2001;
24-AUG-2001;
07-DEC-2001;
23-AUG-2002;
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07-AUG-1998;
08-FEB-1999;
30-APR-1999;
03-MAY-1999;
13-MAY-1999;
08-FEB-2000;
07-JUL-2000;
                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                       The invention relates to methods and compositions for treating
                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 153-154; Opp; English.
                                                                                                                                                                                                                                                                                                                                                                       Use of tumor necrosis factor gamma-beta antagonists for treating of ameliorating a disease or disorders of the gastrointestinal tract, inflammatory bowel disease, Crohn's disease or ulcerative colitis.
                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB;
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09-JAN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human endokine alpha protein.
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DB; AAD63921.
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                                                                                                                                          Similarity
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                                             KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN
                                                                                                   MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA 60
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2000US-00559290.
2000US-0216879P.
2001US-0278449P.
2001US-0034899059.
2001US-0314391P.
2001US-0336695P.
2002US-00226294.
                                                                                                                              Conservative
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Pred. No. 4.7e-97;
Pred. No. 4.7e-97;
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Crohn's disease;
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                                                                    This polypeptide comprises human endokine-alpha, a novel member of the tumour necrosis factor (TNF) family of cytokines that shows 30% similarity and 22% identity to human TNF-alpha. Its amino acid sequence was deduced from a human striatum cDNA clone (see AAV19195). Isolation of this nucleic acid allows production of recombinant endokine-alpha polypeptides in transformed host cells. Endokine-alpha may be involved in disorders of immunomodulation, infection, cell proliferation,
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angiogenesis, tumour metastasis, apoptosis, sepsis and endotoxaemia, and may be useful for treating melanoma and sarcoma, particularly where coupled to a radioisotope or cytostatic agent. Antibodies raised against
                                                                                                                                                                                                                                                                                              Nucleic acid encoding human endokine-alpha - useful for diagnosis treatment of tumour necrosis factor-related diseases.
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n; infection; cell proliferation; angiogenesis; tumour;
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69. .7
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57. .68
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28-MAY-1999;
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                                                                      16-AUG-1996;
                                                                                                                                                                                                           07-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                            Human; endokine alpha; tumour necrosis factor; TNF; immunomodulation; inflammation; cell proliferation; tumour metastasis; apoptosis; sepsis; endotoxemia.
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                                                                                                                                        15-AUG-1997;
                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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       (HUMA-) HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       such as cancer, allergy, diabetes and various neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
   GENOME SCI INC
                                                                      96US-0024058P
                                                                                                                                        97US-00912227.
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100.0%; Prr
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Pred. No. 4.4e-92;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        angiogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytokine;
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                      The present sequence represents human endokine alpha which is a member of the tumour necrosis factor (TNF) family of cytokines. Endokine alpha protein and polynucleotides can be used in diagnostic and therapeutic methods concerning TWF family-related disorders. These include disorders associated with immunomodulation and inflammation, cell proliferation, angiogenesis, tumour metastasis, apoptosis, sepsis and endotoxemia
                                                                                                                                                                                                                                                                                                                          Sequence 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Isolated human endokine alpha gene useful as a diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N.
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                                                                                  129 NKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
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                                                                                                                                                                                                               MPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSK 68
                                                                                                                              WQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLT
                                                                                                                                                  WQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTILT 128
                                                                                                                                                                                             MPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSK 60
                                                              NKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                           AA;
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100.0%; Pred. No. 4.4e-92;
Ltive 0; Mismatches 0;
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               2
                2004, 12:37:39
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Database
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Maximum Match 10
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Maximum DB seq length: 2000000000
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Published Applications AA:*

1: /cgn2 6/ptodata/1/pubpaa/US07 PUBCOMB.pep:*

2: /cgn2 6/ptodata/1/pubpaa/US06_NEW PUB.pep:*

3: /cgn2 6/ptodata/1/pubpaa/US06_NEW PUB.pep:*

4: /cgn2 6/ptodata/1/pubpaa/US06_NEW PUB.pep:*

5: /cgn2 6/ptodata/1/pubpaa/US07_NEW PUB.pep:*

6: /cgn2 6/ptodata/1/pubpaa/US08_NEW PUB.pep:*

7: /cgn2 6/ptodata/1/pubpaa/US08_NEW PUB.pep:*

9: /cgn2 6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2 6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

10: /cgn2 6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

11: /cgn2 6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

12: /cgn2 6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

13: /cgn2 6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

14: /cgn2 6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

15: /cgn2 6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

16: /cgn2 6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

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17: /cgn2 6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2 6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

19: /cgn2 6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
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Copyright (c) 1993 - 2004 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

13	12	11	10	9	80	7	9	ហ	4	ω	N	۳	No.
79.5	85.5	281	608	809	906	906	951	951	951	951	951	951	Score
8.4	9.0	29.5	63.9	63.9	95.3	95.3	100.0	100.0	100.0	100.0	100.0	100.0	Match
246	377	52	113	113	169	169	177	177	177	177	177	177	Query Match Length DB
15	14	9	16	14	13	9	15	14	14	14	13	13	
US-10-424-599-201262	US-10-295-027-280	US-09-864-761-48455	US-10-611-399-17	US-10-338-083-17	US-10-136-511-2	US-09-345-790-2	5 US-10-202-062-40	US-10-310-793-44	US-10-218-547-40	US-10-151-882-39	US-10-116-378-16	US-10-080-455-1	ID
Sequence 201262,	Sequence 280, App	Sequence 48455, A	Sequence 17, Appl	Sequence 17, Appl	Sequence 2, Appli	Sequence 2, Appli	Sequence 40, Appl	Sequence 44, Appl	Sequence 40, Appl	Sequence 39, Appl	Sequence 16, Appl	Sequence 1, Appli	Description

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ALIGNMENTS

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GENERAL INFORMATION:

APPLICANT: Ashkenazi, Avi J.

APPLICANT: Baker, Kevin P.

APPLICANT: Godowski, Paul J.

APPLICANT: Godowski, Paul J.

APPLICANT: Godowski, Paul J.

APPLICANT: Mark, Melanie R.

APPLICANT: Marsters, Scot A.

APPLICANT: Pitti, Robert M.

TITLE OF INVENTION: DNA13355 Polypeptide, A Tumor Necrosis Factor Homolog

FILE REFERENCE: P1150R2

CURRENT APPLICATION NUMBER: US/10/080,455

CURRENT FILING DATE: 1998-11-18

PRIOR APPLICATION NUMBER: US 60/069,661

PRIOR APPLICATION NUMBER: US 60/065,635

PRIOR FILING DATE: 1997-11-18

PRIOR FILING DATE: 1997-11-18

PRIOR FILING DATE: 1997-11-18
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                                                                                            Query Match 100.0%; Score 951; DB 13; Best Local Similarity 100.0%; Pred. No. 2e-92; Matches 177; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                         LENGTH: 177
TYPE: PRT
ORGANISM: Homo sapiens
Length 177;
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RESULT 3
US-10-151-882-39
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                                                                        SOFTWARE: PatentIn version 3.0 SEQ ID NO 39
                                                                                                                                                                                                                               Sequence 39, Application US/10151882
Publication No. US20030059862A1
GENERAL INFORMATION:
APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: Antibodies Against Tumor Necrosis Factor Delta (APRIL)
FILE REFERENCE: PP554
CURRENT APPLICATION NUMBER: US/10/151,882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: P1206R1
CURRENT APPLICATION NUMBER: US/10/116,378
CURRENT FILING DATE: 2002-04-04
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/247,225
PRIOR FILING DATE: EARLIER FILING DATE: 1999-02-09
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/074,0
PRIOR FILING DATE: EARLIER FILING DATE: 1998-02-09
NUMBER OF SEQ ID NOS: 31
SEQ ID NO 16
LENGTH: 177
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APPLICANT: Ashkenazi,
APPLICANT: Goddard, I
APPLICANT: Gurney, A
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Best Local Similarity
                                                                                                                           CURRENT FILING DATE: 2002-05-22
PRIOR APPLICATION NUMBER: 60/293,100
PRIOR FILING DATE: 2001-05-24
NUMBER OF SEQ ID NOS: 48
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APPLICANT: Marsters, Scot A.
APPLICANT: Pitti, Robert M.
APPLICANT: Wood, William
TITLE OF INVENTION: NUCLETC
TITLE OF INVENTION: NUCLETC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
ORGANISM: Homo sapiens
                                                     ENGTH: 177
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RESULT 5
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US-10-218-547-40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 40, Applica Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                     Sequence 44, Application US/10310793 Publication No. US20030198640A1 GENERAL INFORMATION:
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Best Local
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Best Local
               APPLICANT: Rosen, Craig A
APPLICANT: Zhang, Jun
APPLICANT: Wei, Ping
TITLE OF INVENTION: Methods And Compositions
TITLE OF INVENTION: Relating To Human Tumor |
FILE REFERENCE: PF573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/218,547
CURRENT FILING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: 60/312,542
PRIOR FILING DATE: 2001-08-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Methods And Compositions TITLE OF INVENTION: Human Endokine Alpha FILE REFERENCE: PF561
                                                                                                                                                                 APPLICANT: Yu, Guo-Liang
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CURRENT APPLICATION NUMBER: US/10/310,793
                                                                                                                                              APPLICANT:
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TYPE: PRT
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Pred. No. 2e-92;
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                                        Necrosis Factor-Gamma
                                                            For Treating Inflammatory Bowel Diseases
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PRIOR APPLICATION NUMBER: 60/336,695 PRIOR FILING DATE: 2001-12-07

10/226,294

CURRENT FILING DATE:

2002-12-06

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US-10-202-062-40
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                                                                                                                           US-10-202-062-40
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SOFTWARE: PatentIn versi
SEQ ID NO 40
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                                                    Best Local Similarity Matches 177; Conserv
                                                                                    Query Match
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NUMBER OF SEQ ID NOS: 71
COFTWARE: PatentIn version 3.1
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CURRENT FILING DATE: 2002-07-25
PRIOR APPLICATION NUMBER: 60/307,838
PRIOR FILING DATE: 2001-07-27
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TITLE OF INVENTION: Heteromultimeric TNF Ligand Family members
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PRIOR FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: 60/216,879
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PRIOR FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: 09/899,059
PRIOR FILING DATE: 2001-07-06
                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: PF559
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                                                                                                                                        TYPE: PRT
ORGANISM: human
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FILING DATE: 1999-05-13
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APPLICATION NUMBER: 60/180,908
FILING DATE: 2000-02-08
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MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA 60
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Pred. No. 2e-92;
Mismatches
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APPLICANT: Yu, Guo-Lian; APPLICANT: Ni, Jian
APPLICANT: Rosen, Craig;
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Exic K.
REGISTRATION UNMBER: 36,688
REFERENCE/DOCKET NUMBER: 1486
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
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APPLICATION NUMBER:
FILING DATE:
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MEDIUM TYPE: Floppy disk
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APPLICANT: Ni, Jian
APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Human Endokine Alpha
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SOFTWARE: PatentT
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                                                                                                                                                           MPLSHSRTQGAQRSSWKLMLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSK 68
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                                                                    WQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLT
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1100 NEW YORK AVE., NW, SUITE
                                                                                                                                                                                                                                                                                                                                                       169 amino acids
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SYSTEM: PC-DOS/MS-DOS
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100.0%; Pred. No. 1.1e-87;
tive 0; Mismatches 0;
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600
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   169
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US-10-136-511-2

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US-10-338-083-17
Sequence 17, Application US/10338083
Publication No. US20030166559A1
GENERAL INFORMATION:
                                                        ; ORGANISM: Homo sapiens
US-10-338-083-17
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US-10-136-511-2
                                                                                                                                  SOFTWARE: PatentIn version 3.2
SEQ ID NO 17
LENGTH: 113
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LENGTH: 169
  Query Match
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Best Local &
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                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/338,083
CURRENT FILLING DATE: 2003-01-16
PRIOR APPLICATION NUMBER: US 60/345,805
PRIOR FILING DATE: 2002-01-04
PRIOR APPLICATION NUMBER: US 60/373,453
PRIOR FILING DATE: 2002-04-17
NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Tansey, Malu Lourdes G.
APPLICANT: Dahiyat, Bassil I.
TITLE OF INVENTION: Dominant Negative Proteins and Methods Thereof
FILE REFERENCE: A-71273-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Human Endokine Alpha and Methods of Use FILE REFERENCE: 1488.0470007/EKS/PSC CURRENT APPLICATION NUMBER: US/10/136,511 CURRENT FILING DATE: 2002-05-02 PRIOR APPLICATION NUMBER: 09/513,584 PRIOR FILING DATE: 2000-02-25 PRIOR APPLICATION NUMBER: 09/345,790 PRIOR APPLICATION NUMBER: 09/345,790 PRIOR APPLICATION NUMBER: 09/345,790 PRIOR APPLICATION NUMBER: 60/136,788 PRIOR APPLICATION NUMBER: 60/136,788 PRIOR APPLICATION NUMBER: 60/136,788 PRIOR BILING DATE: 1999-05-28 PRIOR FILING DATE: 1999-05-28 PRIOR FILING DATE: 1999-05-28 PRIOR FILING DATE: 1999-05-28
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PRIOR TILING DATE: 1999-02-26
PRIOR APPLICATION NUMBER: 08/912,227
PRIOR FILING DATE: 1997-08-15
PRIOR APPLICATION NUMBER: 60/024,058
PRIOR FILING DATE: 1996-08-16
NUMBER OF SEQ ID NOS: 10
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APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Human E
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  63.9%;
  Score 608;
DB 14;
  Length 113;
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; TYPE: PRT; ORGANISM: Homo sapiens US-10-611-399-17
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PRIOR APPLICATION NUMBER: US 10/338,083
PRIOR FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US 60/345,805
PRIOR FILING DATE: 2002-01-04
PRIOR APPLICATION NUMBER: US 60/373,453
PRIOR FILING DATE: 2002-04-17
NUMBER OF SEQ ID NOS: 23
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US-10-611-399-17
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PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR PELICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR APPLICATION NUMBER: GB 24263.6
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APPLICANT: Desjarlais, John R.
APPLICANT: Tansey, Malu Lourdes G.
APPLICANT: Dahiyat, Bassil I.
TITLE OF INVENTION: DOMINANT NEGATIVE PROTEINS AND METHODS THEREOF FILE REFERENCE: A-71273-3
                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 48455, Application US/09864761 Patent No. US20020048763A1
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Best Local Similarity 100.
Matches 113; Conservative
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APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K
APPLICANT: Chen, Wensheng
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                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
                                                                                                                                                                                                                                                                            TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                         FILE REFERENCE: Aeomica-X-1
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CURRENT FILING DATE: 2003-07-01
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Hanzel, David K.
Chen, Wensheng
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Best Local S
Matches 52
                                                                                                                                                                                                                                                                                                                              Sequence 280, A Publication No.
                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
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                                           APPLICANT: Eos Biotechnology, Inc.
TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compo-
TITLE OF INVENTION: Methods of Screening for Modulators
FILE REFERENCE: 018501-012500US
CURRENT APPLICATION NUMBER: US/10/295,027
CURRENT FILING DATE: 2002-11-13
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APPLICANT:
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OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.2
OTHER INFORMATION: EST HUMAN HIT: BE270854.1, EVALUE 6.50e-01
OTHER INFORMATION: SWISSPROT HIT: P25003, EVALUE 1.20e+00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
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                APPLICATION NUMBER: US 09/663,733 FILING DATE: 2000-09-15
 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 2000-06-30
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APPLICATION NUMBER: PCT/US01/00667
FILING DATE: 2001-01-30
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APPLICATION NUMBER: PCT/US01/00664
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FILING DATE: 2000-09-27
APPLICATION NUMBER: PCT/US01/00666
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Mack, David H.
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Watson, Susan R.
                                                                                                                                                                                                                     Glynne,
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o. US20030232350A1
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60/350,666
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US-10-424-599-201262
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US-10-424-599-201262
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SOFTWARE: Pate
; SEQ ID NO 280
TRUCTH: 377
                  Query Match
Best Local
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SEQ ID NO 201262
                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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   Matches
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Best Local :
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APPLICANT: Kovalic David
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
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PRIOR FILING DATE: 2001-11-21
PRIOR FILING DATE: 2001-11-21
PRIOR FILING DATE: 2001-11-21
                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
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PRIOR APPLICATION NUMBER: US 6
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PRIOR APPLICATION NUMBER: US 60/347,349
PRIOR FILING DATE: 2002-01-10
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NUMBER OF SEQ ID NOS: 1386
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PRIOR FILING DATE: 2002-02-08
PRIOR APPLICATION NUMBER: US 60/356,714
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PRIOR FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: US 60/347,211
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                                                                                                                     NAME/KEY: unsure
LOCATION: (1)..(246
OTHER INFORMATION:
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TYPE: PRT
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                                                                                                                                                                                     TYPE: PRT ORGANISM: Glycine max
                                                                                                                                                                          FEATURE:
                                                                                                         FEATURE:
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                                                                                       INFORMATION:
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ch 8.4%; Similarity 22.9%; 36; Conservative 2
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Score 79.5; DB
Pred. No. 6.1;
21; Mismatches
                                                                                 PAT_MRT3847_23765C.1.pep
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Pred. No. 2.5;
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US-10-149-310-52
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US-10-149-310-50
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                                                                                                                                                                                                                                 Sequence 50, Application US/10149310 Publication No. US20040077039A1 GENERAL INFORMATION:
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Best Local Similarity
Matches 37; Conserv
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CURRENT APPLICATION NUMBER: US/10/149,310
CURRENT FILING DATE: 2003-02-19
PRIOR APPLICATION NUMBER: PCT/US01/29288
PRIOR FILING DATE: 2001-09-19
PRIOR APPLICATION NUMBER: US 60/233,564
PRIOR FILING DATE: 2000-09-19
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APPLICANT: Madden, Kevin T.
APPLICANT: Maxon, Mary
APPLICANT: Maxon, Mary
TITLE OF INVENTION: Modulation of Secondary Metabolite Production by
TITLE OF INVENTION: Zinc Binuclear Cluster Proteins
CURRENT APPLICATION NUMBER: US/10/149,310
CURRENT FILING DATE: 2003-02-19
PRIOR APPLICATION NUMBER: PCT/US01/29288
PRIOR FILING DATE: 2001-09-19
                                                                                  APPLICANT: Sherman, Amir
TITLE OF INVENTION: Modulation of Secondary Metabolite Production
TITLE OF INVENTION: Zinc Binuclear Cluster Proteins
FILE REFERENCE: 14184-019US1
                                                                                                                                                 APPLICANT:
                                                                                                                                                                APPLICANT: Holtzman, Douglas
APPLICANT: Madden, Kevin T.
APPLICANT: Maxon, Mary
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Pred. No. 32;
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn version 3.1
SEQ ID NO 50
LENGTH: 880
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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PRIOR FILING DATE: 2000-09-19
NUMBER OF SEQ ID NOS: 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
nes 37; Conserv
                                                                                                                                                                                                                                                                                   615 ALNENDGKIHIEFVKEPITNVSADSTPSSTTPPIFTNIA---TESYYNKSDISKLVSKTD 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      555 IFSFLKLIQDSTALDKVRAKEIVILPSEEDDNYKPLDTSNATTSSSEPRVDVVQEGLFRE
                                                                                                                                         133 IQNVGGTYELH-VGDTIDLIFNSEHQVLKNNTYWGIILLANPQ 174
                                                                                                                                                                                                                                                                                                                                                                                                                            83 ----SDWK--LEILQNGLYLIYGQVAPNAN----YNDVAPFEVRLYKNKDMIQTLTNKSK 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45 IFIFLQL---ETAKEPCMAK------FGPLPSKWQMASSEPPCVNKV-----
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614 82 8

Search completed: November Job time: 130 secs 2, 2004, 12:52:46

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Minimum
Maximum
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Maximum Match 100%
Listing first 45 s
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Perfect score:
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seq length: 2000000000
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1: /cgn2_6/ptodata/1
2: /ggn2_6/ptodata/1
3: /cgn2_6/ptodata/1
4: /cgn2_6/ptodata/1
5: /cgn2_6/ptodata/1
6: /cgn2_6/ptodata/1
                                                                                                                                                                                                                                                                                                                                                                                                                                            is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                              Match Length
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951
1 MCLSHLENMPLSHSRTQGAQ......VLKNNTYWGIILLANPQFIS
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     November 2,
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
     GenCore version (c) 1993 - 2004
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 US-08-912-227-2
US-09-313-584-2
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US-09-107-532A-3959
US-09-248-796A-20671
US-08-089-397A-11
5395759-2
US-08-089-395-9
US-09-328-352-5760
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US-09-328-352-5760
US-09-328-352-5760
US-09-328-352-258-37
US-09-328-75-381-12
US-09-328-796A-18800
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US-08-332-445A-10
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300.982 Million cell updates/sec
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Sequence 2, Appli
Sequence 3959, Ap
Sequence 3059, Ap
Sequence 601, App
Sequence 20671, Appl
Sequence 20671, Appli
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Sequence 49088, A
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Matches

169; Conservative

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Mismatches

0;

Indels

0.

Gaps

0

9 MPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSK

Query Match 95.3%; Score 906; DB 2; Length 169; Best Local Similarity 100.0%; Pred. No. 2.8e-99;	RESULT 1 US-08-912-227-2 (US-08-912-227-2 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-28-10 (US-08-912-217-210 (US-08-912-210 (US-08-91	ALIGNMENTS	28 71.5 7.5 233 3 US-08-880-342-37 Sequence 37, Appli 29 71.5 7.5 233 4 US-09-589-287B-3 Sequence 3, Appli 30 71.5 7.5 233 4 US-09-513-584-3 Sequence 3, Appli 31 71.5 7.5 233 4 US-09-157-864-9 Sequence 5, Appli 32 71.5 7.5 233 4 US-09-345-790-3 Sequence 5, Appli 33 71.5 7.5 233 4 US-09-345-790-3 Sequence 5, Appli 34 71.5 7.5 233 4 US-09-888-22 Sequence 5, Appli 36 71.5 7.5 233 4 US-09-889-919-5 Sequence 5, Appli 37 7.5 7.5 233 4 US-09-879-919-5 Sequence 5, Appli 38 71.5 7.5 233 4 US-09-588-947A-3 Sequence 3, Appli 39 71.5 7.5 233 4 US-09-588-947A-3 Sequence 3, Appli 40 71.5 7.5 233 4 US-09-255-794A-3 Sequence 3, Appli 41 71.5 7.5 233 4 US-09-255-794A-3 Sequence 3, Appli 41 71.5 7.5 233 6 S422425-2 Sequence 11, Appl 42 71.5 7.5 693 3 US-09-838-586-11 Sequence 11, Appl 45 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 54 71.5 7.5 693 4 US-09-838-586-11 Sequence 11, Appl 54 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 54 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 54 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 54 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 54 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 64 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 64 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 64 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 64 71.5 7.5 693 4 US-09-838-586-11 Sequence 2, Appli 64 71.5 71.5 71.5 71.5 71.5 71.5 71.5 71.5
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Query Match

Best Local Similarity 100.0%; E

Matches 169; Conservative 0;
                                                                              MOLECULE TYPE: protein -09-513-584-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                   INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OCURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/513,584
FILING DATE: 25-FEB-2000
CLASSIFICATION DATA:
APPLICATION NUMBER: US/09/513,584
FILING DATE: 25-FEB-2000
CLASSIFICATION DATA:
APPLICATION NUMBER: US/09/024,058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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APPLICANT: Ni, Jian
APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Human Endokine Alpha and Methods
TITLE OF INVENTION: of Use
                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 60/136,788
FILING DATE: 28-MAY-1999
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/345,790
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FILING DATE: 15-AUG-:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                      FILING DATE: 01-JUL-1999
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FO
ADDRESSEE: P.L.L.C
STREET: 1100 NEW YORK AVE., NW, SUITE 600
CITY: WASHINGTON
                                                                                                                                                                                       TELEPHONE: 202-371-2540
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 60/122,099 FILING DATE: 26-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 36,688 REFERENCE/DOCKET NUMBER: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
ZIP: 20005-3934
                                                                                                                  TOPOLOGY:
                                                                                                                                                   LENGTH:
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                                                                                                                               amino acid
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                                                                                                                                                 169 amino acids
                                                                                                                  linear
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15-AUG-1997
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                                                                                                                                                                                                                                                                                       Eric K.
         95.3%; Score 906; DB 4; I
100.0%; Pred. No. 2.8e-99;
tive 0; Mismatches 0;
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            Indels
          0;
         Gaps
            0;
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US-09-345-790-2
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 14:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
TELEFAX: 202-371-2540
                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                        LENGTH: 169 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 20005-3934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: STERNE, KESSLER, STREET: 1100 NEW YORK AVE.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
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              121
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5. 6521742
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                                                                                                                                                                                                                                          Similarity
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Ni, Jian
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                                                                                                                                                                                                                                                                                                           protein
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/345,790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Human Endokine Alpha NUMBER OF SEQUENCES: 10
                                                                                                                                          69 WQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLT 128
                                                                                                                                                                                                                                                       9 MPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
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NKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS 169
                               NKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANDQFIS 177
                                                                                                                                                                                                    MPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSK
                                                                                                  WOMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLT
                                                                                                                                                                                                                                                                                                                              95.3%; Score 906; DB 4; 100.0%; Pred. No. 2.8e-99;
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NW, SUITE 600
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RESULT 5
US-09-538-092-601
; Sequence 601, Application US/09538092
; Patent No. 6753314
; GENERAL INFORMATION:
; APPLICANT: Glot, Loic
; APPLICANT: Mansfield, Traci A.
; APPLICANT: DESCRIPTION:
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US-09-107-532A-3959
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Patent No. 6583275
GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm
TITLE OF INVENTION: NUCLEIC ACID
                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
LOCATION: (B) LOCATION 1...1
SEQUENCE DESCRIPTION: SEQ ID NO:
OF INVENTION: Protein-Protein Complexes and Method of Using
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NAME: ATINIELLO, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/09/107,532A FILING DATE: 30-Jun-1998 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
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MEDIUM TYPE: CD/ROM ISO9660
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ADDRESSEE: GENOME THERAPEUTICS CORPORATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
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                                                                                                                                                                                                                               157 QVLKNN 162
                                                                                                                                                                                           KVVKDN
                                                                                                                                                                                                                                                                     APNGYOLDSSEFSITVKENONVTTTRINKKSTGSVEIEKIGDLDGLGLPNVVFTIYNSDN
                                                                                                                                                                                                                                                                                                       APNANYNDVAPFEVRLYKNKDMIQTLTNKS-----KIQNVGGTYELHVGDTIDLIFNSEH
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FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                              Score 84.5; DI
Pred. No. 1.4;
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O: 3959:
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AND AMINO ACID SEQUENCES RELATING TO
FARCIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                DB 4;
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US-09-248-796A-20671
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SOFTWARE: CuraPatSeqFormatter Version
SEQ ID NO 601
                                                                                                                                                             Matches
                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 20671
LENGTH: 217
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                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/248,796A CURRENT FILING DATE: 1999-02-12 PRIOR APPLICATION NUMBER: US 60/074,725 PRIOR FILING DATE: 1998-02-13 PRIOR APPLICATION NUMBER: US 60/096,409 PRIOR FILING DATE: 1998-08-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Keith Weinstock et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICANTITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 107196.132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/538,092
CURRENT FILLING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 60/127,352
PRIOR FILING DATE: 1999-04-01
                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 28208
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LOCATION: (0)...(0)
OTHER INFORMATION: Polypeptide Accession Number YML099C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Saccharomyces
FEATURE:
                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                ORGANISM: Candida albicans
                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
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                                                                                                                                                                                Local
                                      114 EVRLYKNKDMIQTLTNKSKIQNVGGT-YELHVGDTIDLIFNSEHQVLKNNTYWG 166
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     555 IFSFLKLIQDSTÄLDKVRAKEIVILPSEEDDNYKPLDTSNATTSSSEPRVDVVQEGLFRE
                                                                                85 PKDWNDAEKQWEPPLIVNPKCATGCGPWEAPLIPNHDYI--GPWFPPDIKNPNYNGI--W 140
                                                                                                                       66 PSKWQMASS--EPP----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83 ----SDWK--LEILQNGLYLIYGQVAPNAN----YNDVAPFEVRLYKNKDMIQTLTNKSK 132
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                                                                                                                                                                                Similarity
TPRLIPNPDYYQVKTPGKLDKPIGGIGFEL-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IQNVGGTYELH-VGDTIDLIFNSEHQVLKNNTYWGIILLANPQ
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                                                                                                                                                             Conservative
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22.7%;
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27.2%;
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Pred. No. 6;
5; Mismatches
                                                                                                                                                                                Score 77; DB 4; Pred. No. 0.84;
                                                                                                                     -CVNKVSDWKLEILQNGLYLIYGQVAP----NANYNDVAPF 113
                                                                                                                                                               Mismatches
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    -WSIESDILFDNIYLG
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RESULT 8
5395759-2
;Patent No. 5395759
; PAPPLICANT: HOLMES, IAN H.;DYALL-SMITH, MICHAEL L.
; APPLICANT: HOLMES, IAN SEQUENCES AND AMINO ACID SEQUENCE
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 887-1500
TELEPAX: (202) 887-0763
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 326 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: ADLER, REID G.
REGISTRATION NUMBER: 30,988
REFERENCE/DOCKET NUMBER: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 2000
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity nes 42; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/089,397A FILING DATE: 07-JUL-1993 CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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STREET: 2000 Pennsylvania Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: unknown
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                                                                                                                                                                                                                                     174 QFIS 177
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                                                                                                                                                                                                                                                                                                                                                                                  72 ASSEPP-----CV-----NKVSDWKLEILQNGLYLIYGQVAPNA---NYNDVAPFEV 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                         26 LWLFCSIVMLLFLC----SFSWLIFIFLQLETAKEPCMAK-----FGPLPSKWQM 71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SABARA, MARTA I.J.
FRENCHICK, PATRICK J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8.1%; Score 77; DB
22.8%; Pred. No. 1.6;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29; Mismatches
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RESULT 9
US-08-496-944-2
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                                      ; MOLECULE TYPE: US-08-496-944-2
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; NUMBER OF SEQUENCES: 14
; CURRENT APPLICATION DATA:
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Query Match
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                                                                                                                                                  INFORMATION FOR SEQ ID NO:
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PILING DATE: 29-APR-1985
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 824,704
                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 2763 amino acids
                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                              NAME: Elmer, James Scott
REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
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                                                                          TOPOLOGY:
                                                                                             TYPE:
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                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                           FILING DATE
                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
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   8.1%;
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   Score 77;
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                                                                                                                                                                   1814
                                                                                                                                                                                                                                                                                                                  Version
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 Length 2763;
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                                                                                                                                                                                               Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Ehrenshaft, Marllyn
APPLICANT: Jenns, Ann E.
TITLE OF INVENTION: Isolated Ge
TITLE OF INVENTION: Resistance
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ADDRESSEE: Virginia C.
STREET: PO Box 37428
                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: BENDETT, VIRGINIA C.
REGISTRATION NUMBER: 37,092
REFERENCE/DOCKET NUMBER: 54
                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                           TYPE: 8
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CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Raleigh
                                                                                                                                                                                                                                                                           TOPOLOGY:
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   297
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                                                                                                                                                                                                 Similarity
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                           --LONGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLTNKSKI------
                                                         NADSDRWLAQYIRAERLCEEVSEQVDLTNTSFYRDVADPATRNPVQTCRNKILNWKMGVP 296
                                                                                                                    SYESVEG-----WRAWLGCHVLSVSMAIFMRKSMTASWT----EQHEQAR--LMLQYSPL
                                                                                                                                                 SHSRTQGAQRSSWKLWLFC---SIVMLLFL---CSFSWLIFIFLQLETAKEFCWAKFGFL
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 QRLRSPLIMFWEHVA-
                                                                                         ---PSKW--
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                                                                                                                                                                                                                                                                                                         550 amino acids
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Ehrenshaft, Maril
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                                                                                                                                                                                               Score 75.5; D: Pred. No. 5.1;
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TAYMHEPVLHTATNKDSFTAPYLAERLSLTDF
                                                                                                                                                                                                            DB 3;
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                                                                                       -- QMASSEP--PCVNKVSDWKLEI-
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US-09-328-352-5760
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SEQ ID NO 5760
LENGTH: 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Gary L. Breton et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5760, Application US/09328352
Patent No. 6562958
                                                                                                                                                                                                                                                SEQ ID NO 33
LENGTH: 27:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
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                                                                                                                               Best
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Best Local S
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CURRENT FILING DATE: 1999-11-18
PRIOR APPLICATION NUMBER: 60/109,283
PRIOR FILING DATE: 1998-11-20
                                                                                                                                                                                                                                                                                    SOFTWARE: Microsoft Office 97
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Famodu, Omolayo O.
APPLICANT: Orozco, Buddy
APPLICANT: Rafalski, Antoni
APPLICANT: Shen, Jennie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
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                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Sterol Metabolism
                                                                                                                                                                                                           TYPE: PRT ORGANISM: Nicotiana tabacum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Acinetobacter baumannii
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                                                                                                                                                                                                                                                  271
                                                                                                               h 7.8%; Score 74.5; DI Similarity 22.7%; Pred. No. 2.3; 34; Conservative 23; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                     PLPH-MLQG-----WLRNYIGGVLLYFISGFLWCFYIYHLKRNVYIPKDAIPSNKAM 81
                                                                         PLSHSRTQGAQRSSWKLWL--FCSIVMLLFLCSFSWLIFIF-----
-LQLETAKEPCMAKFGPLP--SKWQMASSEPPCVNKVSD--WKLEILQNGLYLI---YGQ 100
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Pred. No.
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RESULT 14
US-08-349-357-2
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                                   Sequence 2, Application US/08349357 Patent No. 6265556
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Best Local Similarity
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FILLING DATE: 02-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-LJ 1203
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 535-9001
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
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CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/697,610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
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ADDRESSEE: Campbell and Flores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Reed, John C.
APPLICANT: Sato, Takaaki
TITLE OF INVENTION: CD40 Associated Proteins
NUMBER OF SEQUENCES: 17
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MEDIUM TYPE: Floppy
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STATE: California
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                                                                                                                                                                                                                                                                   --LHLQRVID----SQAEKLK 306
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Pred. No. 6.6;
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Best Local
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APPLICANT: Wisnies
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TELEPAX: (619) 535-8949
INFORMATION FOR SEQ ID NO: 2:
                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 543 amino acids
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REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-LJ 1203
TELECOMMUNICATION INFORMATION:
COMPUTER: VE System 386
OPERATING SYSTEM: MS-DO:
SOFTWARE: Word Perfect
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                NUMBER OF SEQUENCES: 1:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                 TITLE OF INVENTION:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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ZIP: 92122
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FILING DATE: 02-DEC-1994
CLASSIFICATION: 435
                                                                                                                         COUNTRY:
                                                                                                                                             STATE:
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Pred. No. 6.6;
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                                                                     1.44 M storage
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VOLUME: 18
PAGES: 5564
DATE: 1990
RELEVANT RESIDUES IN SEQ ID NO:
PCT-US93-02475-6
Search completed: November 2, Job time: 41 secs
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CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/852,625
FILING DATE: 12 MARCH 1992
ATTORNEY/AGENT INFORMATION:
NAME: Donald G. Lewis
REGISTRATION NUMBER: 28636
REFERENCE/DOCKET NUMBER: BJW-2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 554-2421
TELEPHONE: (619) 554-2421
TELEPHONE: (619) 554-6312
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 157 amino acids
TYPE: AMINO ACIDS
TOPOLOGY: linear
MOLECULE TYPE: protein
FRATTHE.
                                                                                                                                                                                                                                                                                                                     Query Match 7.8%; Score 74; DB 5; Length 157; Best Local Similarity 24.4%; Pred. No. 1.2; Matches 30; Conservative 21; Mismatches 32; Indels
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NAME/KEY: Tumor Necrosis Factor (feline)

PUBLICATION INFORMATION:

AUTHORS: McGraw, R. A., Coffee, B. W., Otto,

AUTHORS: C.M., Drews, R. T. and Rawling, C.A.

TITLE: Gene Sequence of Feline Tumor Necrosis

TITLE: Factor
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                  2004, 12:42:27
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Q74LW5
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Q8GI3M5
Q8GCN3
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N.A. ad=10037686; J., Yu GL., Jang IK., Kim Y J., Yu GL., Jang IK., Kim Y J., Su GL., Jang IK., Kim Y J., Yu GL., Jang IK., Kim Y J., Yu GL., Jang IK., Kim Y J., Su G., Jang IK., Kim Y J., Jang IK.,	E., Baker K., Bal E., Baker K., Bal Aley C., Currell E., Gu Q., Hass P., Jin Y., Johnso bbie E., Sanchez C., T., Woods K., Xi D., Woods K., Xi D., Woods K., Xi J., Zhang Z., Godda V., initiative (SPDI secreted and tran	, Pitti R.M., rush J., Helder , Godowski P.J. the tumor necro	update) update) on update) amily member 1) (Activation-), TL6; , TL6; ata; Vertebrat	Q72VG7 Q8F914 AAS68957 Q805N8 Q80AT3 PROB_OCEIH Q8E0H3 QRE0H3 QBED64 QBIDP7 P89064 QBGCK6 Y61A_MYCPN Q7RIZ1
YJ., Xing L., tein of the tumor L"; GITR. Important for dd endothelial cells heral tissues.	dwin D., Brush J., b., Deuel B., Dowd P., b., Heldens S., n S., Lee J., n S., Lee J., inson J., Vagts A., inson J., Vansura D., rd A., Wood W.I., l., a large-scale smembrane proteins: a	Mark M., Is S., Schow P., , Ashkenazi A.; ssis factor family	<pre>B (Glucocorticoid- inducible TNF-related a; Euteleostomi; ae; Homo.</pre>	Q72vg7 leptospira Q8f914 leptospira Ass68957 leptospir Q805n8 human rotav Q80at3 human rotav Q80e18 streptococc Q8e648 streptococc Q7r934 plasmodium P89064 rotavirus. Q8gck6 mycopiasma Q7ri21 plasmodium

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-!- SUBUNIT: Homotrimer (Potential).

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CARBOHYD
SEQUENCE
TISSUE-Synthetic constructs;
MEDLINE-22388257; PubMed=12477932;
Strausberg R.L., Feingold E.A., Grouse I
Klausner R.D., Collins F.S., Wagner L.,
Altschul S.F., Zeeberg B., Buetow K.H.,
                                                                                                                                                                                AAH69111;
24-MAY-2004 (TrEMBLrel. 27,
24-MAY-2004 (TrEMBLrel. 27,
24-MAY-2004 (TrEMBLrel. 27,
TMFSF18 protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GO; GO:0006916; P:anti-apoptosis; TAS.
GO; GO:0007267; P:cell-cell signaling; TAS.
GO; GO:0007165; P:signal transduction; TAS.
GO; GO:0007165; P:signal transduction; TAS.
InterPro; IPR006052; TNF family.
InterPro; IPR008983; TNF_like.
PROSITE; PS00251; TNF 1; PALSE_NEG.
PROSITE; PS0049; TNF 2; FALSE_NEG.
Cytokine; Glycoprotein; Signal-anchor; Transmembrane.
DOMAIN
1 28 Signal-anchor; Gortchil)
TRANSMEM 29 49 Signal-anchor for type II
                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                      Homo sapiens
                                                                                                                                                                        TNFSF18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AF125303; AAD22634.1; -.
EMBL; AY358868; AAQ89227.1; -.
EMBL; AF117713; AAD19695.1; -.
Genew; HGNC:11932; TNFSF18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified and this statement entities requires a license
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                              SEQUENCE
                                                                                                                                                                                                                                                              AAH69111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the European
use by non-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBCELLULAR LOCATION: Type II membrane protein (Potential) TISSUE SPECIFICITY: Expressed at high levels in the small intestine, ovary, testis, kidney and endothelial cells. INDUCTION: Up-regulated after stimulation by lipopolysacch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GO:0005102; F:receptor binding;
                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       177;
                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HGNC:11932; TNFSF18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             opean Bioinformatics Institute. There are no restrictions on its non-profit institutions as long as its content is in no way d and this statement is not removed. Usage by and for commercial s requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA
                                                                              FROM
                                                                                                                                                                                                                                                                                                                                                          KDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
                                                                                                                                                                                                                                                                                                                                                                                                                 KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                           MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA
                                                                                                                                                                                                                                                                                                                                       KDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
                                                                                                                                                                                                                                                                                                                                                                                               KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN
                                                                                                          s (Human).
Metazoa; Chordata; (
---heria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50
129
161
177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                              N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               177
129
161
20307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MΨ;
                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                  Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytoplasmic (Potential).

Signal-anchor for type II membrane protein (Potential).

Extracellular (Potential).

N-linked (GlcNAc. . .) (Potential).

N-linked (GlcNAc. . .) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 951; DB 1;
Pred. No. 1.2e-80;
                                                                                                                          Craniata; Vertebrata; Catarrhini; Hominidae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3D78CE6B90F4C9E3 CRC64;
                  Grouse L.H., Derge
gner L., Shenmen C.N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAS.
                                                                                                                                                                                                                                                                177
                                                                                                                                                                                                                                                              A
                                                                                                                          Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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   G.M., S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                         Euteleostomi;
; Homo.
    Schuler G.D, Bhat N.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                   177
                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
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RRESULT 3
AAH69319
ID AAH6
AC AAH6
AC AAH6
AC TOPE
DT 01-J
DT 01-J
DT 101-J
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RX MEDIINE=22388257; pubMed=12477932;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Altschul S.F., Zebberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zebberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zebberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M.J., Wosin T.B., Toshiyuki S., Carninci P., Prange C.,

Ra Brownstein M.J., Usdin T.B., Foshiyuki S., Carninci P., Prange C.,

Ra Brownstein M.J., Wosin T.B., Foshiyuki S., Carninci P., Prange C.J.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., McGuenn P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hullon E.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gibbs R.A.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Best I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Krzywinski M.1., W....,
Jones S.J., Marra M.A.;
Jones S.J., marra M.A.;
"Generation and initial analysis of
and mouse cDNA sequences.";
Arad. Sci. U.S.A. 99:16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2004 (TrEMBLrel. 27,
01-JUN-2004 (TrEMBLrel. 27,
01-JUN-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TNFSF18 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH69319
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hopkins R.F., Jordan H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC069111; AAH69111.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCLSHLENMPLSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MCLSHLENMPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KDMIQTLINKSKIQNVGGTYBLHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (APR-2004) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            177 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     constructs;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LSHSRTQGAQRSSWKLWLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20307 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craniata; Vertebrata; Catarrhini; Hominidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 951;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99:16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3D78CE6B90F4C9E3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              more than
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2;
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                            costimulatory for T cells.";
Proc. Natl. Acad. Sci. U.S.A. 100:150
EMBL; AY234223; AAO89011.1; -.
EMBL; AJ57759; CAE12166.1; -.
EMBL; AJ577580; CAE12167.1; -.
MGD; MGI:2673064; Thfef18.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005164; F:tumor necrosis fact
GO; GO:000555; P:immune response; II
InterPro; IPR008983; TNF like.
InterPro; IPR00803636; TNF subf; 1.
SEQUENCE 173 AA; 19745 MW; 1FD222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Blakesley R.W., Touchman J.W., Green E. Rodriguez A.C., Grimwood J., Schmutz J. Krzywinski M.I., Skalska U., Smailus D. Jones S.J., Marra M.A.; "Generation and initial analysis of mor and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-
                                                                                                                                                                                                                                                                                                                                                                 Q80YG2;
01-JUN-2003
01-JUN-2003
05-JUL-2004
                                                                                                                                                                                                                                                STRAIN=DBA/2J;
Bianchini R., Nocent
Submitted (FEB-2003)
                                                                                                                                                                                                                   STRAIN=CBA/Ca;
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                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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Mus musculus (Mouse).
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                                                                                                                                                                                          PubMed=14608036;
Tone M., Tone Y., Adams
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NCE 177 AA; 20307 M
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z J., Myers R.M.,
s D.E., Schnerch
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h A., Schein J
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02-MAR-2004
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CAE12167;
02-MAR-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Mouse glucocorticoid-induced tumor necrosis factor costimulatory for T cells.";
Proc. Natl. Acad. Sci. U.S.A. 100:15059-15064 (2003)
EMBL; AJ577579; CAE12166.1; -.
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Mammalia; Eutheria;
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173 AA; 19745 MW;
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SEQUENCE FROM
STRAIN=CBA/Ca;
                                                    NCBI_TaxID=10090;
                                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                             GITR ligand.
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Rodentia;
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Pred. No. 5.6e-31;
0; Mismatches 58;
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Sciurognathi; Muridae;
                                                                             Craniata; Vertebrata; I
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                PRT;
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Murinae; Mus
                                                                                                    Euteleostomi;
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                                                                               Murinae;
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EMBL; AY267900; AAP96745.1; -.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0005164; F:tumor necrosis factor re
GO; GO:0006955; F:immune response; IEA.
InterPro; IPR003636; TNF subf.
ProDom; PD002012; TNF subf.; 1.
SEQUENCE 173 AA; 19773 MW; 1FD22953BCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q7TNY2;
Q7TNY2;
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PubMed=14647196;
Kim J.D., Choi B.K., Bae J.S., Le
Youn B.S., Vinay D.S., Kwon B.S.;
"Cloning and characterization of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Waldmann H.;
"Mouse glucocorticoid-induced tumor necrosis factor receptor ligand costimulatory for T cells.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GITR ligand.
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EMBL; AJ577580; CAE12167.1; -.
Alternative splicing.
SEQUENCE 173 AA; 19745 MW; 1FD2294CACF424D2 CRC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-2003
01-OCT-2003
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VLQTLMNDFQILPIGGVYELHAGDNIYLKFNSKDHIQKNNTYWGIILMPDLPFIS 173
                                          MIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS 177
                                                                                       SSSKWHMTSPKPHCVNTTSDGKLKILQSGTYLIYGQVIPVDKKYIKDNAPFVVQIYKKND
                                                                                                                   LPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAP-NANY-NDVAPFEVRLYKNKD
                                                                                                                                                                                MEEMPLRESSPORAERCK-KSWLLCIVALLLMLLCSLGTLIYTSLK-PTVIESCMVKFEL
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                                                                                                                                                                                                                                                                       Conservative
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Rodentia;
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52.6%;
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Pred. No. 1.3e-
20; Mismatches
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Sciurognathi; Muridae;
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No. 1.3e-30;
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Submitted (AUG-2003) to the EMBL/GenBank/;
EMBL; AY320040; AAP70494.1; -.
EMBL; AY359852; AAQ55265.1; -.
GO; GO:0016020; C:membrane; IEA.
GO; GO:0004872; F:receptor activity; IEA.
GO; GO:0005164; F:tumor necrosis factor ro
GO; GO:0005955; P:immune response; IEA.
InterPro; IPR003636; TNF subf.
ProDom; PD002012; TNF_subf; 1.
                                                                                                                                                                      AAQ55265;
AAQ55265;
02-MAR-2004
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Q7TS55;
01-OCT-2003
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SEQUENCE
                                                              Eukaryota;
Mammalia; E
                                                                                                                                                  02-MAR-2004 (TIEMBLIFEL 27, C
02-MAR-2004 (TIEMBLIFEL 27, I
02-MAR-2004 (TIEMBLIFEL 27, I
02-MAR-20094 (TIEMBLIFEL 27, I
Glucocorticoid-induced-tumor
  SEQUENCE FROM N.A
                                      NCBI_TaxID=10090;
                                                                                                           Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=129/J;
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Yu K.Y., Kim H.S., Song S.Y., Min S.S., Jeong J.J., Youn B.S
"Identification of a ligand for glucocorticoid induced tumor
factor receptor constitutively expressed in dendritic cells.
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Mammalia; Eutheria;
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                                                              ; Metazoa;
Eutheria;
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                                                                                                                                                                                                                                                              PRELIMINARY;
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(TTEMBLrel. 25, Last sequence update)
(TREMBLrel. 27, Last annotation update)
(Glucocorticoid-induced-tumor necrosis factor receptor
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Rodentia;
                                                                 Rodentia;
                                                                                     Chordata;
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52.0%;
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Last annotation
r necrosis factor
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                                                              Craniata; Vertebrata;
Sciurognathi; Muridae;
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                                                                 Muridae;
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RESULT 10
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GN Name=T
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Best Loc
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MEDLINE=22883945; PubMed=14521928;
Yu K.Y., Kim H.S., Song S.Y., Min S.S., Jeong J.J., Youn B.S.;
Yu Kern, Kim H.S., song S.Y., Min S.S., Jeong J.J., Youn B.S.;
"Identification of a ligand for glucocorticoid-induced tumor necrosis factor receptor constitutively expressed in dendritic cells.";
Biochem. Biophys. Res. Commun. 310:433-438(2003).
                         use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-FEB-2003 (Rel. 41, Created)
29-MAR-2004 (Rel. 43, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Tumor necrosis factor ligand superfamily member
                                                                                                                                                                                                                                                                                                                                                                                                                                                          L) (CD154 protein).
Name=TNFSF5; Synonyms=CD40LG,
Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vert
Eukaryota; Metazoa; Chordata; Craniata; Vert
Archosauria; Aves; Neognathae; Galliformes;
                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Yu K.-Y., Min S.S., Youn B.-S.; Submitted (AUG-2003) to the EMB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yu K.-Y., Min
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                                                                                         European Bioinformatics Institute.
                                                                                                                                                  proteolytic processing (By similarity). SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                      SWISS-PROT entry is copyright. It is produced through en the Swiss Institute of Bioinformatics and the EN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHICK
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                                                                      There are no restrictions as its content is in
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Phasianidae; Phasianinae;
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GO; GO:0016021; C:integral to membrane; ISS.
GO; GO:0005174; F:CD40 receptor binding; ISS.
GO; GO:0005174; F:CD40 receptor binding; ISS.
GO; GO:0042100; P:B-cell proliferation; ISS.
GO; GO:0006954; P:Lukocyte cell adhesion; ISS.
GO; GO:0007159; P:leukocyte cell adhesion; ISS.
GO; GO:0007159; P:Leukocyte cell adhesion; ISS.
GO; GO:0030168; P:platelet activation; ISS.
InterPro; IPR003263; TNF_5.
InterPro; IPR003263; TNF_5.
InterPro; IPR003636; TNF_5.
InterPro; IPR003636; TNF_Subf.
Pfdm; PF00229; TNF; 1.
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Q74LW5;
05-JUL-2004
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       Pridmore R.D., Berger B., Desiere F., Vilanova D., Pittet A.-C., Zwahlen M.-C., Rouvet M., Altermann Mollet B., Mercenier A., Klaenhammer T., Arigoni F. The genome sequence of the probiotic intestinal F. Lactobacillus johnsonii NCC 533.";
                                                                                STRAIN=NCC
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SITE
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ProDom; PD008600; TNF 5; 1.
ProDom; PD002012; TNF 5; 1.
PROSITE; PS00251; TNF 1; 1.
PROSITE; PS0049; TNF 2; 1.
                                                                                             SEQUENCE FROM N.A.
                                                                                                                                          Bacteria; Firmicutes;
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                                                                  PubMed=14966310;
                                                                                                                   NCBI_TaxID=33959;
                                                                                                                                                        Lactobacillus johnsonii.
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                                                                                                                                                                                                                                                                                                                                                                                                                        KWQMASSEPPCVNKVS--DWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLY-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glycoprotein, Signal-anchor, Transmembrane.

1 272 Tumor necrosis factor ligand
                                                                                 533;
Acad.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45
110
190
124
146
251
                                                                                                                                                                                                                (TrEMBLrel.
                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                       KNKDMIQTLTNKSKIQNV--GGTYELHVGDT--IDLIENSEHQVLKNNTYWGIIL
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111
229
124
146
251
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30832 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            11.4%;
                                                                                                                                           Lactobacillales;
U.S.A.
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27,
27,
                                                                                                                                                                                                                                                                                                                                                                                                                                               22;
                                                                                                                                                                                          Last sequence update)
Last annotation updat
                                                                                                                                                                                                                   Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Potential.
N-linked (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein (Potential).
Extracellular (Potential).
Cleavage (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytoplasmic (Potential).
Signal-anchor for type II membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    member 5, soluble form (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumor necrosis factor ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            member 5, membrane form
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8CD0338A924E044B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                            108.5;
No. 0.0
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d (GlcNAc...)
                                                                                                                                                                                                                                        273
                                                        Vilanova D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (By similarity).
                                                                                                                                           Lactobacillaceae,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                        update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  44;
                     nn E., Barran
i F., Schell
l bacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                        Barretto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Potential).
                                             Barrangou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    similarity)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 272;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               superfamily
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                                                                                                                                                                                                                                                                                                                                                                                                                                                19;
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RESULT 12
AASS050
ID AASS050
AC AASS0
AC AASS0
DT 02-M
RESULT 13
Q86IB8
ID Q86IB
AC Q86IB
DT 01-JU
DT 01-JU
DT 01-MA
DE Hypot
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Best Local S
Matches 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
Matches 42
                     Q86IB8;
01-JUN-2003
01-JUN-2003
01-MAR-2004
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02-MAR-2004
02-MAR-2004
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Complete
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pridmore R.D., Berger B., Desiere F., Vilanova D., Barretto C., Pittet A.-C., Zwahlen M.-C., Rouvet M., Altermann E., Barrangou R., Mollet B., Mercenier A., Klaenhammer T., Arigoni F., Schell M.A.; "The genome sequence of the probiotic intestinal bacterium Lactobacillus johnsonii NCC 533."; Proc. Natl. Acad. Sci. U.S.A. 101:2512-2517(2004).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hypothetical protein. SEQUENCE 273 AA; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PubMed=14966310;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=NCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=33959;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bacteria; Firmicutes; Lactobacillus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAS08050;
  Hypothetical
                                                                                                                 Q86IB8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lactobacillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAS08050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        124 IQTLTNKSKIQNV--GGTY----ELHVGDTIDLIFNSE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AE017200; AAS08050.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AE017200; AAS08050.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity 42; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      proteome; Hypothetical 273 AA; 31108 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WIF----LIVEIG-----INIFLGIELWQTPTLLSAGSTFTQTDIKSETSADQTTIPKVN
                                                                                                                                                                                                                                 REVMRFKDDSQNVYQGKNYTYLSELSEGD--DYIFNQKTKYGEFFAATARLHIIVKDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DKQ----EDGYYLAAKNDDSWIKKATQQVKGQVENNSSENLISVHLDKPITLSKNKKEAL 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DWKLEILQNGLYL--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSKWQM---ASSEPPCVNKVS
                                                                                                                                                                                                                                                                         IQTLTNKSKIQNV--GGTY----ELHVGDTIDLIENSE----
                                                                                                                                                                                                                                                                                                                                                                 DWKLEILQNGLYL------IYGQVAPNANYNDVA----
                                                                                                                                                                                                                                                                                                                                                                                                                WIF----LIVFIG-----INIFLGIELWQTPTLLSAGSTPTQTDIKSETSADQITIPKVN 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WLFCSIVMLLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSKWQM----ASSEPPCVNKVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REVMRFKDDSQNVYQGKNYTYLSELSEGD--DYIFNQKTKYGEFFAATARLHIIVKDN
                       (TrEMBLrel.
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                                                             (TrEMBLirel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
  protein.
                                                                                                                    PRELIMINARY,
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                                                                                                                                                                                                                                                                                                                      EDGYYLAAKNDDSWIKKATQQVKGQVENNSSENLISVHLDKPITLSKNKKEAL 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31108 MW;
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                       24,
24,
26,
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27,
27,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 88.5; DB
Pred. No. 5.9;
32; Mismatches
                       Created)
Last sequence update)
Last annotation updat
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Last sequence update)
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Pred. No. 5
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34414AF96D1747A8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34414AF96D1747A8 CRC64;
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                                                                                                                    516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lactobacillaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .9;
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                          update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
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                                                                                                                                                                                                                                                                                                                                                                        -PFEVRLYKNKDM 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           57;
                                                                                                                                                                                                                                                                              -HQVLKNN 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -HQVLKNN 162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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ACCOMENTATION OF THE PROPERTY 
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Best Local (
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                                                                                                                                                                                                                                                                                               Query Match
Best Local
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0896D6; O1-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
KilA protein, putative phage-related DNA binding protein.
Name=kilA; OrderedLocusNames=CTC01071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-22(92622; PubMed=12097910; Gloeckner G., Bichinger L., Szafranski K., Pachebat J., Dear P., Lehmann R., Baumgart C., Parra G., April J.F., Guigo R., Kumpf K., Tunggal B., Cox E., Quail M.A., Platzer M., Rosenthal A., Noegel A.A. "Sequence and analysis of chromosome 2 of Dictyostelium discoideum."; Nature 418:79-85(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dictyostelium discoideum (Slime mold).
Eukaryota; Mycetozoa; Dictyosteliida; Dictyostelium.
NCBI TaxID=44689;
[1]
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Hypothetical protein.
SEQUENCE 516 AA; 58667 M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. STRAIN=AX4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=Massachusetts / E88;
MEDLINE=22457253; PubMed=12552129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Baumgart C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=AX4;
                                                                                                                                                                                                                                                                                                                                                                                                         Complete proteome. SEQUENCE 270 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AE015939; AA035654.1;
InterPro; IPR003497; BRO_N.
Pfam; PF02498; Bro-N; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proc. Natl. Acad.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Brueggemann H.,
Decker I., Herz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=1513;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clostridium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bacteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clostridium tetani.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gottschalk G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The genome sequence of Clostridium tetani, the causative agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          419
                                             140
                                                                                                                     134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                 KAKNKMLELQNKQKEQIIGELKPRADYTD-----RILKNKGLV-TITQIAKDYGMTGTG
                                                                                                                                                                                     KVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLTNKSKIQNVGGT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                n H., Baeumer S., Fricke W.F., W
Herzberg C., Martinez-Arias R.,
                                                                                                                                                                                                                                                                                                                                                                                                             270 AA;
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                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                             31533 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9.1%;
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                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                                   Score 85.5;
Pred. No. 11;
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7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 86.5;
100:1316-1321(2003)
                                                                                                                                                                                                                                                                                                                                                                                                             C378AB524C0133A8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80B308CF6CDF97C2
                                                                                                                                                                                                                                                                     Mismatches
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., Merkl R.,
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                                                                                                                                                                                                                                                                                                                                     Length 270;
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, Henne A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R., Kumpf K.,
Noeqel A.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  516;
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RA Dunham I., Hunt A.R., Collins J.E., Bruskiewich R., Beare D.M.,
RA Clamp M., Smink L.J., Ainscough R., Almeida J.F., Babbage A.K.,
RA Badguley C., Bailey J., Barlow K.F., Bates K.M., Beasley O.P.,
RA Burrill W.D., Burton J., Carder C., Carter N.P., Chen Y., Clark G.,
RA Bird C.P., Blakey S.E., Bridgeman A.M., Buck D., Burgess J.,
RA Clegg S.M., Cobley V.E., Cole C.G., Collier R.E., Connor R.,
RA Clegg S.M., Cobley V.E., Cole C.G., Collier R.E., Connor R.,
RA Conroy D., Corby N.R., Coville G.J., Cox A.V., Davis J., Dawson E.,
RA Conroy D., Corby N.R., Coville G.J., Cox A.V., Davis J., Dawson E.,
RA Conroy D., Corby N.R., Coville G.J., Cox A.V., Davis J., Dawson E.,
RA Conroy D., Corby N.R., Coville G.J., Durbin R.M., Blington A.G.,
RA Conroy D., Corby N.R., Coville G.J., Durbin R.M., Blington A.G.,
RA Conroy D., Corby N.R., Coville G.J., Cox A.V., Davis J., Dawson E.,
RA Charley J.D., Dockree C., Dodsworth S.J., Durbin R.M., Blington A.G.,
RA Gilbert J.G.R., Goward M.E., Grafham D.V., Garner A.M., D., Hall C.,
RA Hall R.E., Hall-Tamlyn G., Heathcott R.W., Ho S., Holmes S.,
RA Hunt S.E., Jones M.C., Kershaw J., Kinberley A.M., King A.,
RA Laird G.K., Langford C.F., Leversha M.A., Lloyd C., Lloyd D.M.,
RA Martyn I.D., Mashreghi-Mohammadi M., Matthews L.H., Mccann O.T.,
RA McClay J., Mclaren S., McMuray A.A., Milne S.A., Mortimore B.J.C.T.,
RA McClay J., Mclaren S., Kemuray A.A., Milne S.A., Mortimore B.J.C.T.,
RA Phillips S.H., Plumb R.W., Ramsay H., Ramsey Y., Rogers L., Ross M.T.,
RA Scott C.E., Sehra H.K., Skuce C.D., Smalley S., Smith M.L.,
Soderlund C., Spragon L., Steward C.A., Sulston J.E., Swann R.M.,
RA Williams L., Williams S.A., Williamson H., Willner T.E., Wilming L.,
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Nomura N., Miyajima N., Sazuka T., Tanaka A., Kawarabayasi Y.,
Sato S., Nagase T., Seki N., Ishikawa K.-I., Tabata S.;
"Prediction of the coding sequences of unidentified human genes.
The coding sequences of 40 new genes (KIAA0001-KIAA0040) deduced analysis of randomly sampled cDNA clones from human immature myel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q15049; Q8TAG4; Q9GRP5; Q9UGY8;
15-JUL-1998 (Rel. 36, Created)
05-JUL-2004 (Rel. 44, Last sequence up
05-JUL-2004 (Rel. 44, Last annotation
Membrane protein MLC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=2122590; PubMed=11326298; DOI=10.1038/sj/mp/4000869; Meyer J., Huberth A., Ortega G., Syagailo Y.V., Jatzke S., Moessner R., Strom T.M., Ulzheimer-Teuber I., Stoeber G., Sch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         channel is associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=Hippocampus;
MEDLINE=21225990; P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Construction of expression-included "Construction of 330 KIAA cDNA clones.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE=Bone marrow;
MEDLINE=96051387; P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REVISIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Psychiatry
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of 330 KIAA cDN
9:99-106(2002).
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Butheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mutation
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Q96RP5; Q9UGY8;
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Catarrhini;
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A clones for
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r KIAA
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    Nature
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RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Raha S.S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley N.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Richards J., Helon E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Balkesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Bolakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Bolakesley R.W., Touchman J.W., Schmutz J., Myers R.M.,
RG Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human paramences" ""

"Touchman J.M. Semences "."
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RA Shintani A., Shibuya K., Yoshizaki Y., Aoki N., Mitsuyama S.,

RA Shintani A., Shibuya K., Yoshizaki Y., Aoki N., Mitsuyama S.,

RA Roe B.A., Chen F., Chu L., Crabtree J., Deschamps S., Do T.,

RA Roe B.A., Chen F., Fu Y., Hu P., Hua A., Kenton S., Lai H., Lao H.I.,

RA Lewis J., Lewis S., Lin S.-P., Loh P., Malaj E., Nguyen T., Pan H.,

RA Lewis J., Lewis S., Lin S.-P., Loh P., Malaj E., Nguyen T., Pan H.,

RA Phan S., Qi S., Qian Y., Wang Z., White J., Willingham D., Wu H., Yao Z.,

RA Zhan M., Zhang G., Chissoe S., Murray J., Miller N., Minx P.,

RA Zhan M., Zhang G., Chissoe S., Murray J., Miller N., Minx P.,

RA Fulton R., Johnson D., Bemis G., Bentley D., Bradshaw H., Bourne S.,

RA Cordes M., Du Z., Fulton L., Goela D., Graves T., Hawkins J.,

RA Hinds K., Kemp K., Latreille P., Layman D., Ozersky P., Rohlfing T.,

RA Korf I., Bedell J.A., Hillier L.W., Mardis E., Waterston R.,

RA Korf I., Bedell J.A., Hillier L.W., Mardis E., Waterston R.,

RA Wilson R., Emanuel B.S., Shaikh T., Kurahashi H., Saitta S.,

RA Hinds M., Kedra D., Seroussi E., Fransson I., Dumanski J.P.,

RA Hoyrard M., Kedra D., Seroussi E., Fransson I., Tapia I., Bruder C.E.,

RA Peyrard M., Kelta D., Sizuya H., Simon M.I., Dumanski J.P.,

RA Peyrard M., Kelta D., Seroussi E., Fransson I., Tapia I., Bruder C.E.,

RA C'Brien K.P., Wilkinson P., Bodenteich A., Hartman K., Hu X.,

Wathre AD., AGA 465 (1000)
    "Identification megalencephalic
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MEDLINE=21152271; PubMed=11254442;
Leegwater P.A.J., Yuan B.Q., van der Steen J.,
Koenst A.A.M., Ilja Boor P.K., Mejaski-Bosnjak
van der Maarel S.M., Frants R.R., Oudejans C.B.
                                                                                       van der Knaap
                                                                                                                    VARIANTS MLC SER-91; LYS-140 AND SER-140.
PubMed=11935341; DOI=10.1007/s00439-002-0682-x;
Leegwater P.A.J.. Boor P.K.I., Yuan B.Q., van d
Konst A.A.M., Oudejans C.B.M., Schutgens R.B.H.
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TISSUE=Platelet;
                                                                                                                                                                                                                                                                                                                       Pronk J.C., van der Knapp M.S.;
"Mutations of MLC1 (KIAA0027), encoding a
cause megalencephalic leukeencephalopathy
Am. J. Hum. Genet. 68:831-838(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and mouse cDNA sequences."
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of novel mutations in MLC1 responsible for leukoencephalopathy with subcortical cysts.";
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PubMed=12189496; DOI=10.1007/s00439-002-0770-y;
Ben.Zeev B., Levy-Nissenbaum E., Lahat H., Anikster Y., Shinar Y.,
Brand N., Gross-Tzur V., MacGregor D., Sidi R., Kleta R., Frydman M.,
Pras E.;

VARIANT MLC GLU-58

Genet. 110:279-283 (2002).

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1 TISSUE SPECIFICITY: Expressed in the brain, with highest levels found in the amygdala, nucleus caudatus, thalamus and hippocampus.

1 DISEASE: Defects in MLC1 are a cause of megalencephalic leukoencephalopathy with subcortical cysts (MLC) [MIM:604004]. MLC is an autosomal recessive disorder characterized by macrocephaly, deterioration of motor functions with ataxia, and spasticity, deterioration of motor functions with ataxia, and spasticity, magnetic resonance imaging, with diffuse white-matter abnormalities and the invariable presence of subcortical cysts.

2 Internal subtype of catatonic schizophrenia which is a genetically heterogeneous disorder characterized by psychosis and psychomotor disturbances.
                                                                                             Query Match
Best Local Similarity
                                                                                Matches
                                                                                                                                                                                                                                                                                                                                          INIT MET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entities requires a license agreement (See http://www.isb-or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Megalencephalic leukoencephalopathy with subcortical cysts; a founder effect in Israeli patients and a higher than expected carrier rate among Libyan Jews.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                   VARIANT
                                                                                                                                                                             VARIANT
                                                                                                                                                                                                                                                                                                                                                                    GO; GO:0000299; C:integral Direct protein sequencing; Transmembrane; Transport.
                                                                                                                                                                                                                                                                                                                                                                                                             MIM;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Genew; HGNC:17082; MLC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; BC028425;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- FUNCTION: May be a transporter. May act as a non-selective
neuronal cation channel.
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                                                                                                                                                                                                                                                                                                                                                                                                              604004;
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AL022327;
                          126 IWFGCKLVLNPSAININFNLILLLLLELLMAATVIIA-----ARSSEEDCKKK--
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84 DWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLTNKSKIQNVGGTYELH 143
                                                    26 LWLFCSIVM--LLFLCSFSWLIFIFLQLETAKEPCMAKFGPLPSKWQMASSEPPCVNKVS 83
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CAB51559.1; ALT_INIT.
AAH28425.1; -.
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20.8%;
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Pred. No. 16;
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T -> R (in MLC).
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P -> S (in MLC).
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218 VDDSV----SGPHLSV---TFFWILVACFPSAIA 244
                           144 VGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS 177
                                                          ---KGSMSDSANILDEVPFPARVLKSYSVVEVIAGISAV--LGGIIALN 217
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Search completed: November Job time: 196 secs 2 2004, 12:40:57

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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1: geneseqp1990s:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result

	Score	% Query Match	Length	BB	ID	Description
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5	675	100.0	169	7	ADC01858	8 Human
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7	675	100.0	177	N	AAY06646	6 Human
89	675	•	177	4	AAB47056	PRO175
9	675		177	4	AAB20109	9 Human im
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11	675	•	177	4	AAB47287	
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14	675		177	თ	ABR42323	Human
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16	675	100.0	177	7	ADC35222	2 Human
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18	566		508	4	ABG17426	Novel
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	•	•			-bearing fr	ope-bearing fra	ope-bearing fr	racellular domain	ransmembrane domain	racellular domain"		tumour necrosis fact n; cell proliferation sis; endotoxaemia; n				169 AA.	ALIGNMENTS	AAU37017 ADK16905 AAR41159 AAR49835 AAW27436 AAW27436 AAW27432 ABO07169 AAB07755 AAO17756 AAB57054 ABB57054 ABB57054 ABB57054 AAW23146 AAW27431 AAW274				
					agment (Claim	ragment (Claim 13)"	ain"	ain"	ain"		factor; human; ration; angiogenesis; tumour; ia; melanoma; sarcoma;						Aau37017 Staphyloc Adk16905 Nanoarcha Aar41859 Feline TN Aar98835 CD40 asso Aaw27436 Human CRA Aar98833 CD40 asso Aaw27432 Human CRA Abo07169 Human p53 Aar99259 Full-leng Aab67615 Amino aci Aao17756 Murine CD Abb57054 Mouse isc Add2542 Binding d Aaw3146 LMP1 asso Aaw27431 Human CRA Aay98166 Human TRA Aao17757 Human CD4 Abo07171 Human CD4 Ado80957 RING-SH c AdD80957 RING-SH c					

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KW chronic lymphocyte disorder; tumour; parasitic disease; attritis;

KW autoimmune disease; lupus; multiple sclerosis; chronic inflammation;

KW acute inflammation; acute allograft rejection; graft versus host disease;

KW transplant rejection; foetal resorption; faecal peritonitis; allergy;

KW bowel disease; sepsis; leukaemia; chronic hypergammaglobulinemeia;

KW polychondritis; scleroderma; Wegener granulomatosis; dermatomyositis;

KW polychonic active hepatitis; myasthenia gravis; psoriasis; vitilogo;

KW Steven-Johnson syndrome; idiopathic sprue; gluten-sensitive enteropathy;

KW gemphigus vulgaris; Goodpasture's disease; bullous pemphigoid;

KW discoid lupus; dense deposit disease; endocrine ophthalmopathy;

KW irritable bowel disease; asthma; Grave's disease; sarcoidosis; cirrhosis;

KW lymphopenias; polyarteritis nodosa; Sjogren's syndrome; Hechet's disease;

KW primary myxedema; polymyositis; mixed connective tissue disease;

KW keratoconjunctivitis sicca; vernal keratoconjunctivitis; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This polypeptide comprises human endokine-alpha, a novel member of the tumour necrosis factor (TNF) family of cytokines that shows 30% similarity and 22% identity to human TNF-alpha. Its amino acid sequence was deduced from a human striatum cDNA clone (see AAV19195). Isolation of this nucleic acid allows production of recombinant endokine-alpha polypeptides in transformed host cells. Endokine-alpha may be involved in disorders of immunomodulation, infection, cell proliferation, and angiogenesis, tumour metastasis, apoptosis, sepsis and endotoxaemia, and may be useful for treating melanoma and sarcoma, particularly where coupled to a radioisotope or cytostatic agent. Antibodies raised against endokine-alpha are useful diagnostically and for treatment of TNF-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yu G,
                                                                                                                                                                                                                                                                                                                                                                                                               A human endokine-alpha polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 169 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   associated disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid encoding human endokine-alpha - useful for diagnosis treatment of tumour necrosis factor-related diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB08785 standard; protein; 169 AA
                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                             endokine-alpha; cytokine; tumour necrosis factor; TNF; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NPQFIS 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fig 1A-B; 78pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
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Pred. No. 2.2e-69;
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Location/Qualifiers

RESULT 3
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AAY53061 standard; protein; 169 AA

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                                                                                                                                                                                                                                                                                                                           cc autoimmune disease, lupus, arthritis, multiple sclerosis, chronic cc inflammation, acute inflammation, acute allograft rejection, graft versus constitutes, transplant rejection, foetal resorption, faecal cc peritonitis, skin allergies, bowel disease, sepsis, leukaemia, chronic cc hypergammaglobulinemeia, polychondritis, scleroderma, Wegener cc granulomatosis, dermatomyositis, chronic active hepatitis, myasthenia cc gravis, psoriasis, Steven-Johnson syndrome, idiopathic sprue, vitilogo, cg gluten-sensitive enteropathy, pemphigus vulgaris, Goodpasture's disease, cullous pemphigoid, discoid lupus, dense deposit disease, endocrine cc ophthalmopathy, irritable bowel disease, asthma, Grave's disease, carrocidosis, cirrhosis, juvenile diabetes, insulin dependent diabetes conlectius, uvetitis, lymphopenias, polyarteritis nodosa, 5jogran's connective tissue disease, keratoconjunctivitis sicca, and vernal
                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence represents a human endokine-alpha polypeptide. The polypeptide is a cytokine which is similar to tumour necrosis factor (TNF). The endokine-alpha polynucleotides and polypeptides are useful for treating AIDS, chronic lymphocyte disorder, tumours, parasitic disease, treating AIDS, chronic lymphocyte disorder, tumours, parasitic disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polynucleotide encoding endokine alpha protein, which is a member of tumor necrosis factor useful for treating inflammatory diseases, disorders such as cancer, allergy, diabetes and various neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yu G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-FEB-1999;
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                                                                                                                                                                                                                                                                                Sequence 169 AA;
                                                                                                                                                                                                                                                                                                                   keratoconjunctivitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 16; Fig 1; 263pp; English
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164
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                                                                                                                                                                                                                                Similarity
                                   NPQFIS 126
                                                                    PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                PFEVRLYKNKDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
                                                                                                                                         ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                             ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 60
                                                                                                                                                                                                               Conservative
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99US-0136788P
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100.0%; P
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                                                                                                                                                                                                           Score 675; DB 3;
Pred. No. 2.2e~69;
; Mismatches 0;
                                                                                                                                                                                                                                             Length 169;
                                                                                                                                                                                                               Indels
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RESULT 4
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents human endokine alpha which is a member of the tumour necrosis factor (TWF) family of Cytokines. Endokine alpha protein and polynucleotides can be used in diagnostic and therapeutic methods concerning TNF family-related disorders. These include disorders associated with immunomodulation and inflammation, cell proliferation,
                human; endokine alpha; melanoma; sarcoma; tumour; tumour regression; infection; viral; bacterial; yeast; fungal; Toxoplasma gondii; Schistosoma manson; Listeria monocytogenes; tumour necrosis factor; TNF_related disorder; endokine alpha-related disorder; immunomodulation;
                                                                                                                                                                                                           06-NOV-2003
                                                                                                                                                                                                                                                                                                              ADA11464 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 169 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY53061;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     104
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                                                                                                                                                                                                                                                                                                                                                                                                                                            164
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                                                                                                                                                       endokine alpha.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fig 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                            NEGEIS
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                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tumour metastasis, apoptosis, sepsis and endotoxemia
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Pred. No. 2.2e-69;
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19 44 Query Match Best Local S Matches 126

Similarity

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Score 675; DB 6; Pred. No. 2.2e-69; Mismatches

Length 169; Indels

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Conservative

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ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA

PFEVRLYXNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA

120

Sequence

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proliferation, angiogenesis, tumour metastasis, apoptosis, sepsis or endotoxaemia. The antibody is useful diagnostically or therapeutically as antagonists in the treatment of alpha and/or TNF-related disorders. The antibody is also useful for purification of the protein. The antibodies are useful for detecting the protein and for tracking the fate of various regions of a protein precursor which undergoes post-translational
                                                                                                                                                                               patient life-span through a local injection. the protein is also useful for treating viral, bacterial, yeast, fungal and other infections e.g., Toxoplasma gondii, Schistosoma mansoni, Listeria monocytogenes etc. The protein is also useful for treating other tumour necrosis factor (TWF)-related disorders. The nucleic acid is useful as probes for gene mapping by in situ hybridisation and for detecting expression of endokine alphagene in human tissue e.g. by Northern blot analysis. The nucleic acid is also useful for diagnosing an endokine alpha-related disorder such as disorders associated with immunomodulation and inflammation, cell
                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated human endokine alpha polypeptide. A cell recombinant for the human endokine alpha polypeptide is useful for producing the protein by recombinant techniques. The antigenic epitope bearing peptides and polypeptides are useful to raise antibodies including monoclonal antibodies. The peptides and antipeptide antibodies are used in a variety of qualitative or quantitative assays for the protein. The protein is useful for tumour targeting and thus used in patients with melanoma and sarcoma for tumour regression and extension of patients with melanoma and sarcoma for tumour regression and extension of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated endokine alpha polypeptide, a member of tumor necrosis factor ligand family, and antibodies against the polypeptides, useful treating melanoma, sarcoma, and viral, bacterial, fungal infections.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (YUGG/) YU G.
(NIJJ/) NI J.
(ROSE/) ROSEN
                                                   processing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 16; Fig 1; 29pp; English.
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                                   endokine alpha.
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                                                     The present sequence represents the amino acid sequence of
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The invention relates to an isolated endokine alpha polypeptide (a member of the tumour necrosis factor family), appearing as ADC01858, the sequence of the endokine alpha polypeptide having an sequence encoded by the cDNA clone contained in ATCC Deposit number 97640 (A1) and the sequence of an epitope-bearing portion of the above polypeptides. Also included are the encoding nucleic acid (its homologues, complements or fragments where the fragment comprises at least 50 contiguous nucleotides), provided that the fragment is not from a region starting at nucleotide 26 and ending at nucleotide 476 of ADC01857), making a recombinant vector comprising the nucleic acid and an isolated antibody or antibody fragment that binds specifically to endokine alpha. The DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   chronic lymphocyte disorder; tumour; parasitic disease; autoimmune disease; lupus; arthritis; multiple sclerosis; inflammation; graft versus host disease; transplant rejection; skin allergy; bowel disease; wound; sepsis; Hodgkin's disease; chronic lymphocyte leukaemia; Burkitt's lymphoma; scleroderma; chronic active hepatitits; myasthenia gravis; psoriasis; autoimmune thyroiditis; Goodpasture's disease; asthma; Graves disease; cirrhosis; insulin dependent diabetes mellitus; Sjogren's syndrome; glomerulonephritis; hepatitis; Parkinson's disease; atherosclerosis;
                                                                                                                                                                                                                                                                                                                                                            Novel isolated endokine alpha polypeptide AIDS, chronic lymphodisorder, common variable immunodeficiency, a tumor, parasitic autoimmune disease, lupus, arthritis, multiple sclerosis.
                                                                                                                                                                                                                                                                                                             Claim 11; SEQ ID NO 2; 90pp; English
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28-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA19355; tumour necrosis factor homologue; receptor GITR; immunogen; antibody; apoptosis; mammalian cancer cell; tumour necrosis factor (TNF)-alpha secretion; primary T- cell;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and protein are useful for treating an individual having a disorder chosen from AIDS, chronic lymphocyte disorder, common variable immunodeficiency, a tumour, parasitic disease, autoimmune disease,
                                                                                                                                                                                                                                                                                                         W09925834-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         proinflammatory response.
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     97US-0065635P
                                                                                                        98WO-US024621
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Pred. No. 2.2e-69;
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RESULT 7
AAYO6646
ID AAYO
XX AAYO
AC AAYO
AC Huma
XX PRO3
KW PRO3
KW infil
KW thex
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SHOME
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Best Local S
Matches 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polypeptide is a tumour necrosis factor homologue. The DNA19355 polypucleotide sequence can be used to derive hybridisation probes for e.g. isolating similar sequences, gene mapping, genetic analysis, etc. Nucleic acids which encode DNA19355 can also be used to generate transgenic or knockout animals, which are useful in the development and screening of therapeutically useful reagents. The DNA19355 polypeptides may be used in diagnostic assays to detect the presence of the receptor immunogens to raise antibodies. The polypeptides may also be used to induce apoptosis in mammalian cancer cells. DNA19355 polypeptides stimulate secretion of tumour necrosis factor (TNF)-alpha in primary T-cells, and so can be used to stimulate a proinflammatory response in
             Modified-site
                                                               Domain
                                                                                         Domain
                                                                                                                                 Homo sapiens
                                                                                                                                                                                                             Human
                                                                                                                                                                                                                                                                 AAY06646;
                                       Domain
                                                                                                                                                        therapy.
                                                                                                                                                                                   PRO364 ligand;
                                                                                                                                                                                                                                       26-OCT-1999
                                                                                                                                                                                                                                                                                       AAY06646 standard; protein; 177
                                                                                                                                                                      inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New DNA19355 polypeptide as tumour necrosis factor homolog
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Godowski PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present
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                                                                                                                                                                                                           PRO364 ligand.
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                                                                                                                                                                                                                                                                                                                                                                                                                         PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIIILA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence represents a polypeptide designated DNA19355.
                                                                                                                                                                                                                                      (first
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                                                                                                                                                                  ; tumour necrosis factor receptor; human; apoptosis; antiinflammatory; NF-KB activation; autoimmune dise
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Mark MR;
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/note=
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             129
                                                                                                   Location/Qualifiers
note= "N-glycosylation"
                                                  'note= "transmembrane domain"
                                                                             note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86pp; English
                                       .177
                                                                . 51
                        "extracellular domain"
                                                                          "cytoplasmic domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Marsters SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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Pred. No. 2.4e-69;
                                                                                                                                                                                                                                                                                         AA.
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                                                                                                                                                                   disease;
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Best Local Sim
Matches 126;
                PRO364; human; glucocorticoid-induced tumor necrosis factor; receptor; hdGIR; ligand; hGIRL; PRO175; tumour necrosis factor receptor; TNFR; human umbilical vein endothelial cell; HUVEC; cardiac hypertrophy; myocardial infarction; PGF_2alpha; trauma; cancer; angiogenesis; age related macular degeneration; antibody, periodontal disease; vascular-related drug targeting; atherosclerosis; hypertension; inflammatory vasculitides; Reynaud's disease; aneurysm; arterial restenosis; thrombophlebitis; tunor angiogenesis; lung; liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence represents a putative ligand for PRO364 (see also AAY0605), a novel member of the tumour necrosis factor receptor family. The sequence was deduced from an isolated cDNA clone (see AAX87726). Hydropathy analysis suggests a type II transmembrane homology. The mol.wt. is 20,308. Identity is shown to human Apo-ZL (19.8%), Fas/Apolligand (19.0%), TNF-alpha (20.6%) and lymphotoxin-alpha (17.5%). PRO364 is useful for modulating apoptosis, NF-KB activation and proinflammatory or autoimmune responses in mammalian cells
                                                                                                                                                                                         AAB47056;
                                                                                                                                                                                                                 AAB47056 standard;
                                                                                                                                        PR0175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-494296/41
N-PSDB; AAX87726.
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                                                                                                                                                                                                                                                                                                        NPQFIS 126
                                                                                                                                                                                                                                                                                                                                            PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                                                                                                                                                                                                                                                                                                                ETAKEPCMAKFGPLPSKWOMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
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                                                                                                                                                                                                                                                                                                                            PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                                                                                                                                                                                                                                                                                               ETAKBPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
            neuropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                    ilarity 100.0%;
Conservative (
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                                                                                                                                                             (first entry)
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            rheumatoid
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                                                                                                                                                                                                                  177
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 675; DB 2;
Pred. No. 2.4e-69;
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          arthritis
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CC This sequence represents PRO175 polypeptide, which is a human gluco-corticoid-induced tumor necrosis factor ligand (hGITRL). The CC corresponding receptor (hGITR), PRO364, is given in AAB47054. PRO364 and CC PRO175 may be used in a mixture with a cardiovascular, endothelial, angiogenic or angiostatic agent for the treatment of a cardiovascular. CC endothelial, angiogenic or angiostatic disorder. The PRO364 sequence was consisted from an expressed sequence tag (EST) database as having homology to members of the tumour necrosis factor receptor (TNFR) family of CC polypeptides. The PRO175 cDNA sequence was isolated from a library of CC DNA fragments derived from human umbilical vein endothelial cells CC (HUVEC). Administering an effective amount of PRO364 or PRO175 or their antagonists is useful for treating cardiac hypertrophy (which is constituted by myocardial infarction and characterized by the presence of initiated by myocardial infarction and characterized by the presence of constituted level of PGF_2alpha), trauma, a cancer, or age-related constituted properties and characterized by the presence of inhibiting angiogenesis induced by PRO364 or PRO175 in a human suffering cardiac hypertrophy and the properties of the properties are numerical disorder. PRO364 or PRO175, or their antagonists are useful disorder. PRO364 or PRO175, or their cardiac form a retinal disorder. PRO364 or PRO175, or their antagonists are useful disorder. PRO364 or PRO175, or their antagonists are useful disorder. PRO364 or PRO175, or their antagonists are useful for antagonists.
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                                                                                                                                                                                                                                                                          antagonists, are useful for vascular-related drug targeting or as therapeutic targets for the treatment or prevention of atherosclerosis, hypertension, inflammatory vasculitides, Reynaud's disease, aneurysms, arterial restensis, thrombophlebitis, tumor angiogenesis, gut protection or regeneration and treatment of lung or liver fibrosis, periodontal diseases, attraction of bone-forming cells, central and peripheral nervous system disease and neuropathies and rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Composition for diagnosing and treating cardiovascular, endothelial angiogenic disorders, comprises a PRO364 or PRO175 polypeptide.
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                                                                                                                                                                                                                                          Sequence
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                               PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                       ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
    PFEVRLYKNKDMIQTLTNKSKIQNVGGTYBLHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                 ETAKEPCMAKFGPLPSKWOMASSEPPCVNKVSDWKLEILONGLYLIYGQVAPNANYNDVA
                                                                                                                                                                Conservative
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                                                                                                                                                                              100.0%;
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                                                                                                                                                                0
                                                                                                                                                           Score 675; DB 4;
Pred. No. 2.4e-69;
0; Mismatches 0;
                                                                                                                                                                                                   Length 177;
                                                                                                                                                                Indels
                                                                                                                                                                0;
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                                                                                                                                                                                                                                                                                                                                Ashkenazi AJ, baa...
Gurney AL, Hillan KJ,
          immunomodulator protein (20 kBa, pi 8.08) showing homology to tumour immunomodulator protein (20 kBa, pi 8.08) showing homology to tumour necrosis factor family members. The invention provides polynucleotides (see AAB20150-62) encoding novel human PRO proteins (see AAB20188-20) including PRO175. Claimed compositions comprising these proteins or their agonists are useful for increasing infiltration of inflammatory cells into a tissue of a mammal, stimulating or enhancing an immune response in a mammal, or increasing the proliferation of T-lymphocytes in a mammal in response to an antigen. Claimed compositions comprising the PRO polypeptide or its antagonist have the opposite effect. A claimed method for treating an immune related disorder, such as a T cell disorder, involves administering the PRO polypeptide, an agonist antibody or an antagonist antibody. The disorder is selected from systemic lupus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antiarthritic; antiinflammatory; antianaemic; immunosuppressive;
antithyroid; antidiabetic; neuroprotective; hepatotropic; viruci
dermatological; antipsoriatic; antiasthmatic; antiallergic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human immunostimulant PRO175
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB20109;
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                                                                                                                                                                                                                                        New PRO polypeptides, nucleic acids and (ant)agonists, diagnosing and treating immune-related disorders, such sclerosis, rheumatoid arthritis and diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-2000; 2000WO-US006884.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200105972-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRO175; UNQ149;
                                                                                                                                                                                                             Claim 20; Fig 4; 127pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ımmunostimulant.
                                                                                                                                                                                   The present sequence is that of PRO175 (UNQ149), a novel human
                                                                                                                                                                                                                                                                                                                                                                                               (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; protein; 177 AA.
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                                                                                                                                                                                                                                                                                                                                                                     Baker KP,
                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0144758P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /label= Mature_protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immune disease; autoimmune disease; antirheumatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Asn is N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "N-myristoylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Asn is N-glycosylated
                                                                                                                                                                                                                                                                                                                                                        Mark MR,
                                                                                                                                                                                                                                                                                                                                                         Marsters
                                                                                                                                                                                                                                                                                                                                                                      Goddard
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SA,
                                                                                                                                                                                                                                                                                                                                                         Godowski PJ;
Pitti RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         virucide;
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RESULT 10
AAB53065
ID AAB5
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AC AAB6
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Best Local :
   12-MAR-1999;
14-MAY-1999;
02-JUN-1999;
23-JUN-1999;
20-JUL-1999;
26-JUL-1999;
01-SEP-1999;
                                                                                                                                                                                                                         08-MAR-1999;
                                                                                                                                                                                                                                                                                      05-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cardiac hypertrophy; cardiovascular disorder; endothelial disorder; angiogenic disorder; atherosclerosis; osteoporosis; hypertension; myocardial infarction; diabetic retinopathy; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and Crohn's disease, gluten-sensitive enteropathy, Whipple's disease, (auto) immune-mediated skin diseases (such as bullous skin disease, erythema multiforme and psoriasis), allergic diseases (such as asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity and urticaria), immunologic diseases of the lung and transplantation associated diseases (such as graft rejection and graft-versus-host disease) (all claimed). Claimed methods of diagnosing these disorders comprise detecting the level of expression of the PRO gene. Also claimed are a method of identifying a compound capable of inhibiting the expression or activity of the PRO polypeptide, vectors, host cells,
                                                                                                                                                                                                                                                                                                                                                    14-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                              WO200053753-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human angiogenesis-associated protein PRO175,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alzheimer's disease; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Crohn's disease; psoriasis; endometriosis; ulcer; wound healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB53065 standard; protein; 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 177 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             thyroiditis, diabetes mellitus, immune-mediated renal disease, demyelinated diseases (such as multiple sclerosis), autoimmune chronic active hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing cholangitis, inflammatory bowel disease (ulcerative colitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     arthritis, spondyloarthropathy, systemic sclerosis, idiopathic inflammatory myopathy. Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune thromboc sarcoidosis, autoimmune haemolytic anaemia, autoimmune thromboc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               112
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  angiogenesis-associated protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLTYGQVAPNANYNDVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NPOFIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; ilarity 100.0%; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and a method of stimulating an immune response in a mammal
                                                                                                                                                                                                                                                                                2000WO-US000219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
99US-0123957P
99US-0134287P
99US-01312252
99US-0141037P
99US-0144758P
99US-0145698P
99US-0145698P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transgenic animal.
                                                                                                                                                                                                                  99WO-US005028.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 675; DB 4;
Pred. No. 2.4e-69;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        autoimmune thrombocytopaenia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               endothelial cell growth;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    arthritis;
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S В Ş 뮹 Š

NPQFIS

126

112 121

PFEVRLYKNKDMI

Query Match Best Local S Matches 126

Local Similarity

100.0%;

Score 675; DB 4; Pred. No. 2.4e-69; Mismatches

Length

177; 0;

Indels

Gaps

126;

Conservative

0

52 61

Н

ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLBILQNGLYLIYGQVAPNANYNDVA

PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA

120 111 60 밁 Ś 밁 5 B

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The invention relates to novel human angiogenesis-associated proteins CC designated PRO proteins (AAB53064-B53097), and to nucleic acids encoding CC PRO proteins. The invention also relates to vectors and host cells CC comprising a PRO nucleic acid, the recombinant production of a PRO CC comprising a PRO protein, agonists or antagonists of a PRO protein, agonists or antagonists of a PRO protein, agonists or antagonists of a PRO protein, and CC compounds which inhibit the expression of a PRO gene. The invention CC expression or activity, diagnosing a cardiovascular, endothelial or acquiression or activity, diagnosing a cardiovascular, endothelial or any openic disorder, or a susceptibility to such a disorder by detecting CC mutations in a PRO gene, or the expression level of a PRO gene within a CC particular tissue; treating a cardiovascular, endothelial or angiogenic disorder via the administration of a PRO protein, PRO nucleic acid, or CC PRO agonist or antagonist; a retroviral gene therapy vector comprising a CC cell growth, cardiac hypertrophy or PRO-induced angiogenesis via the administration of a PRO protein, or an agonist or antagonist thereof. PRO cadministration of a PRO protein, or an agonist or antagonist thereof. PRO cadministration of a PRO protein, antibodies against proproteins, proceed administration of a PRO proteins, antibodies against proproteins, proceed actives and PRO antagonists may be used as therapeutic agents to treat CC atherosclerosis, osteoporosis, myocardial infartetion, hypertension, diabetic retinopathy, rheumatoid arthritis, Crohn's disease, Huntington's disease or extrabe proprocess and arthritis and control of the proprocess                                          endometriosis, ulcers, wounds, cancer, Alzheimer's disease, Huntington's disease, or stroke. PRO nucleic acids are additionally useful in the recombinant production of PRO proteins, as hybridisation probes to screen libraries to isolate cDNAs with sequence identity to PRO proteins, to map genes encoding PRO proteins, to analyse genetic disorders, and in gene therapy. PRO nucleic acids can also by used to produce transgenic animals useful for the development and screening of potential therapeutic agents. The present sequence represents a PRO protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-SEP-1999;
15-SEP-1999;
15-SEP-1999;
05-OCT-1999;
30-NOV-1999;
30-NOV-1999;
02-DEC-1999;
02-DEC-1999;
Sequence 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated nucleic acid for producing a PRO polypeptide, analyzing genetic disorders and treating cardiovascular, endothelial or angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disorders,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69; Fig 4; 293pp; English.
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Pitti RM,
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AA
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99WO-US021090.
99WO-US021547.
99WO-US023089.
99WO-US028313.
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99WO-US028564
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y AL, Hilla
, Watanabe
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Hillan KJ,
tanabe CK, W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Williams PM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerber H, Gount
Kuo SS, Mark MR, Mar
TO PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Goddard A;
ark MR, Marsters SA;
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RESULT 11
AAB47287
AC AAB47
XX AAB47
XX AAB47
XX AAB47
XX AAB47
XX PROJ
XX PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-NOV-1999;
30-NOV-1999;
05-JAN-2000;
24-FEB-2000;
15-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRO; type II transmembrane protein; tumour necrosis factor; stroke; heart hypertrophy; cardiovascular; endothelial; angiogenic; disorder; myocardial infarction; cardiac hypertrophy; PGF 2alpha; trauma; bone; cancer; age-related macular degeneration; wound; burn; hypertension; diabetes mellitus; osteoporosis; ischaemia; atherosclerosis; psoriasis; rheumatoid arthritis; Crohn's disease; amylotrophic lateral sclerosis; endometriosis; angina; neoplasms; periodontal disease; cartilage; TNF; Alzheimer's disease; Parkinson's disease; Huntington's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAY-2000;
17-MAY-2000;
30-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB47287;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRO175 polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB47287 standard;
The sequences given in AAB47287-90 show PRO polypeptides. PRO175 shows type II transmembrane protein typology, and portions of PRO364 show homology to members of the tumour necrosis factor (TNP) family, thereby indicating that it may be a novel member of the TNP family. PRO175 and PRO185 stimulated heart hypertrophy. PRO cDNA's may be used to identify a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified-site
                                                                                                                                                                                                       Isolated PRO polypeptide useful in treating and discardiovascular, endothelial or angiogenic disorder mellitus, myocardial infarction, arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200140464-A1
                                                                                                                                                     Claim 56; Fig
                                                                                                                                                                                                                                                                                                                                        2001-381383/40.
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                                                                                                                                                                                                                                                                                                           AAC85945
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                                                                                                                                                                                                                                                                                                                                                                                                               ΑJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US000219.
2000WO-US005004.
2000WO-US006884.
2000WO-US008439.
2000WO-US013705.
2000WO-US014941.
2000WO-US014941.
                                                                                                                                                                                                                                                                                                                                                                                        Mark MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US022031
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                                                                                                                                                        2; 144pp;
                                                                                                                                                                                                                                                                                                                                                                                                               Baker KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US028409.
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161. .16
/label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'label= Transmembrane domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label= N-myristoylation site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l= Signal peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .= Mature PRO175
                                                                                                                                                                                                                                                                                                                                                                                          Marsters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-linked glycosylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-linked glycosylation
                                                                                                                                                           English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Extracellular domain
                                                                                                                                                                                                                                                                                                                                                                                        Ferrara N, Godowski PJ, (
sters SA, Paoni NF, Pitti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             site
                                                                                                                                                                                                                                                                 diagnosing
                                                                                                                                                                                                                                    e.g. cancer,
                                                                                                                                                                                                                                                                                                                                                                                             Gurney AL;
i RM, Wood
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RESULT 12
AABSOUT 12
AABSO XX
XX AABSO
XX 21-M2
XX CABSO

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮍
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        compound that inhibits PRO, diagnosing a cardio- vascular, endothel angiogenic disorder in a mammal by detecting PRO cDNA, treating cardiovascular, endothelial or angiogenic disorder in a mammal, and inducing cardiac hypertrophy or inhibiting endothelial cell growth angiogenesis in a mammal. The mammal is a human which has suffered
                                                                                                                                                                                                      23-JUN-1999;
20-JUL-1999;
26-JUL-1999;
28-JUL-1999;
01-SEP-1999;
30-NOV-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         myocardial infarction, cardiac hypertrophy characterized by the presence of elevated PGF 2alpha, trauma, cancer or age-related macular degeneration. Trauma includes wounds or burns. Other treatable diseases include diabetes mellitus, osteoporosis, ischaemia, hyper-tension, rheumatoid arthritis, Crohn's disease, atherosclerosis, psoriasis, endometriosis, angina, neoplasms, periodontal disease, bone and carrilage repair, Alzheimer's disease, Parkinson's disease, Huntington's disease,
  05-JAN-2000;
06-JAN-2000;
11-FEB-2000;
18-FEB-2000;
18-FEB-2000;
24-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; PRO; cardiant; antiangiogenic; antiarteriosclerotic; hypotensive vasotropic; antirheumatic; antiarthritic; antiinflammatory; cytostatic; vulnerary; antianginal; gene therapy; cardiovascular disease; endothelial disorder; angiogenic disorder; cancer; periodontal disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amylotrophic lateral sclerosis, and stroke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PRO175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB50979
                                                                                                                                                        02-DEC-1999;
16-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                            02-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-DEC-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   wound
                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                healing.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
99WO-US030095.
2000WO-US0003719.
2000WO-US0003765.
2000WO-US003565.
2000WO-US004341.
2000WO-US004342.
2000WO-US004344.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US013705
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99US-0141037P.
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                                                                                                                                                                                   99WO-US028565.
                                                                                                                                                                                                                 99WO-US028409.
                                                                                                                                                                                                                                      99WO-US028313.
                                                                                                                                                                                                                                                                                            99US-0146222P.
                                                                                                                                                                                                                                                                                                                 99US-0145698P.
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                                                                                                                                                                                                                                                                                                                                              -0144758P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 675; DB 4; 100.0%; Pred. No. 2.4e-69;
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AAU81953
ID AAU81
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XX AU81
XX Humar
XX retir
XW retir
XW purit
XW Systi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Simi
Matches 126;
                                               Human; PRO; antiinflammatory; ophthalmological; vasotropic; retinal cell injury; ocular disease; retinitis pigmentosa; macular degeneration; retinal detachment; retinal tear; retinal degenerative disease; macular hole; degenerative myopia; acute retinal necrosis syndrome; traumatic chorioretinopathy; Purtscher's retinopathy; oedema; ischaemic condition;
         retinal vision occlusion; collagen vascular disease; thrombocytopaenic purpura; uveitis; retinal vasculit systemic lupus erythematosus; environmental trauma.
                                                                                                                                                                       Human PRO175
                                                                                                                                                                                                      09-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic acids, polypeptides, agonists and antagonists are useful for reating cardiovascular, endothelial or angiogenic disorders in a mammal. Examples of these disorders include cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, Reynaud's disease, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis and lymphangitis. The PRO polypeptides and antagonists are also used to prevent tumour angiogenesis and for treating periodontal diseases. They are also used to stimulate wound healing and intibodies are useful for diagnosing a cardiovascular, endothelial or angiogenic disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-MAR-2000;
10-MAR-2000;
15-MAR-2000;
21-MAR-2000;
30-MAR-2000;
                                                                                                                                                                                                                                                               AAU81953 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ashkenazi
Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 177 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 71; Fig 2; 182pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disorders in a mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paoni NF, Pitti RM,
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                                                                                                                                                                                                                                                                                                                                                                          NPOFIS 126
                                                                                                                                                                                                                                                                                                                                                                                                                        PFEVRLYKNKDMIQTLTINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGITLLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                    PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AJ, Landa Godowski
1 Godowski
                                                                                                                                                                                                                                                                                                                                              NPQFIS 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ETAKBPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence is one of seventeen novel PRO polypeptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; 2000WO-US005841.
; 2000WO-US006319.
; 2000WO-US006884.
; 2000WO-US007532.
; 2000WO-US008439.
                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                               protein; 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
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i PJ, Gurney AL
, Watanabe CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoding PRO polypeptides which are useful in of cardiovascular, endothelial or angiogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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    Gerber H, Gerritsen
    Kuo SS, Mark MR, Ma
Williams PM, Wood WI;

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                675; DB 4;
No. 2.4e-69;
                          vasculitis; Eales disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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13-SEP-1999;
15-SEP-1999;
15-SEP-1999;
29-NOV-1999;
30-NOV-1999;
01-DEC-1999;
01-DEC-1999;
01-DEC-1999;
01-FEB-2000;
11-FEB-2000;
12-FEB-2000;
24-FEB-2000;
24-FEB-2000;
15-MAR-2000;
15-MAR-2000;
17-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                                                                                                           99WO-US028301
2000WO-US000319
2000WO-US0003565
2000WO-US003365
2000WO-US004341
2000WO-US004414
2000WO-US00504
2000WO-US005841
2000WO-US005841
2000WO-US006884
2000WO-US008439
2000WO-US013705
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99WO-US021090
                                                                                                                                                                                                                                                                  99WO-US028214
99WO-US028313
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Kljavin Wood WI; IJ, Lafleur Baker **,** A Mark MR, Goddard A, Godowski PJ, Gurney Mark MR, Marsters SA, Pitti RM, Gurney AL; Watanabe CK;

N-PSDB; 2002-130120/17.)B; ABK28562.

Promoting survival of retinal cells, or delaying or preventing retinal cell injury or death, by contacting retinal cells with PRO175, 220, 216, 243, 306, 346, 322, 536, 943, 840, 828, 826, 1068 or PRO1132 polypeptide Claim 44; Fig 2; 152pp; English.

The invention relates to promoting the survival of retinal cells, or CC delaying or preventing retinal cell injury or death, by contacting the CC retinal cells with the polypeptide such as PROJ75, PRO220, PRO216, CC PRO243, PRO3066, PRO346, PRO327, PRO827, PRO827, PRO828, PRO8286, CC PRO1068 or PRO1132 polypeptide. Also included are the nucleic acids a cell comprising the PRO proteins, a vector comprising the nucleic acids. CC enlocating the vector, and anti-PRO antibody. The PRO proteins are cc useful for promoting survival of retinal cells (retinal neurons such as CC retinal ganglion cells, displaced retinal ganglion cells, amacrine cells, retinal ganglion cells, insplaced retinal ganglion cells, amacrine cells, phorizontal neurons or bipolar neurons, rod control of the proteins are cc pithelial cells), or delaying or preventing retinal cell injury or death ce pithelial cells), or delaying or preventing retinal cell injury or death consed by ocular disease (which is or is associated with retinitis consents), retinal degeneration, retinal decachment, retinal tear, cc retinopathy, retinal degeneration and iscaement, retinal tear, cc myopia, acute retinal necrosis syndrome, traumatic chorioretinopathy or contusion, puttscher's retinopathy, oedema, an ischaemic condition, cc central or branch retinal vision occlusion, collagen vascular disease, control to proper the prevented by substantially not causing angiogenesis or mitogenesis. The present sequence represents a PRO protein

Sequence 177 A

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                                                    Query Match
Best Local S
Matches 126
                                                    126;
   52
                                                                Similarity
              ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                   100.0%;
ilarity 100.0%;
Conservative (
                                                  0,
                                                Score 675; DB 5;
Pred. No. 2.4e-69;
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                                                                        Length 177;
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                                                     Вb
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                                                                                                                Matches
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                                                                                                                                                                                                                                    The present sequence is the protein sequence of human GITRL polypeptide. The invention relates to compositions comprising heterotrimeric complexe of tumour necrosis factor (TNF) ligand family members, and their use in the detection, prevention and treatment of disease. In preferred embodiments, the heterotrimeric complex comprises full-length or extracellular portions of GITRL together with full-length executive portions of other TNF ligand family members. The heterotrimeric complexes of the invention are useful for treating an heterotrimeric complexes of the invention are useful for treating an entirement discusses.
                                                                                                                                                                                                                                                                                                                                                                                                            New heteromultimeric complex having a first polypeptide member of the tumor necrosis factor (TNF) ligand family, and a second different mem of TNF ligand family, useful for treating cancer, osteoporosis or an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hilbert DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-JUL-2001; 2001US-0307838P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                      Sequence 177
                                                                                                                                                                                                autoimmune disease, cancer or osteoporosis, and particularly for inhibiting cancer cell proliferation, increasing B cell proliferation, inducing apoptosis of T cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  immunomodulator;
                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                   autoimmune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HUMA-) HUMAN GENOME SCI INC
                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        112
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DB; ACC57909.
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112
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PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                         PFEVRLYKNKDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
                                                                             ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                                                                                                                                                                                                                                       Page 382-383; 388pp; English.
                                                                                                                Conservative
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                                                                                                                            100.0%;
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                                                                                                                            Score 675; DB 6;
Pred. No. 2.4e-69;
                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic;
                                                                                                                                           Length 177;
                                                                                                                   Indels
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                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                  complexes
                                                                                                                                                                                                                                                                                                                                                                                                                                  member
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                                                                                                                                                                                                                                                                                                                                                                                           antialiergic, antiasthmatic, neuroprotective, optostatic, antianaemic, antiallergic, antiasthmatic, neuroprotective, optobalmological, tuberculostatic, antidiabetic, antipsoriatic, anti-HIV, antiarteriosclerotic, vasotropic, thyromimetic, and haemostatic activity. antiarteriosclerotic, vasotropic, thyromimetic, and haemostatic activity. The antibody or its fragment are useful for treating, preventing or meeliorating cancer such as Non-Hoddkin's lymphoma or multiple myeloma in human, disease or disorder such as autoimmune disease, and graft versus host disease (GVHD). The autoimmune disease is systemic lupus erythematosus, rheumatoid arthritis or Sjogren's syndrome. The antibody is useful for detecting, diagnosing, prognosing, treating, preventing or ameliorating a disease or disorder associated with aberrant APRIL or APRIL receptor expression or aberrant function of APRIL or APRIL receptor. The disease or disorders includes autoimmune and inflammatory receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel isolated antibody that immunospecifically binds tumor necrosis factor delta, useful for treating, preventing or ameliorating Non-Hodgkin's lymphoma, multiple myeloma, rheumatoid arthritis or Sjogren's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human tumour necrosis factor endokine-alpha.
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                                                                                                                  gravis, Hashimoto's disease, immunodeficiency syndrome, Bruton's disease, infectious diseases (e.g. acquired immunodeficiency syndrome (AIDS)), and proliferative disorders (e.g. leukemia). The present sequence represents
                                                                                                                                                                                                                                                                                                                                                       disorders such as autoimmune neutropenia, haemolytic anaemia, dermatitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel antibody or its fragment, which immunospecifically binds tumour necrosis factor Delta (TNF-delta/APRIL).
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                                                                                                                                                                                                                                    uveitis, tuberculosis, diabetes mellitus, psoriasis, caucer or communication, particularly B cell cancers, immune disorders such as myasthenia system, particularly B cell cancers, immune disorders such as myasthenia
                                                                                                                                                                                                                                                                         asthma, allergic encephalomyelitis, myocarditis, multiple sclerosis, uveitis, tuberculosis, diabetes mellitus, psoriasis, cancer of the immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The antibody of the invention has dermatological, immunosuppressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HUMA-) HUMAN GENOME SCI INC
                                                                                         tumour necrosis
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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Query Match 100.0%; Score 675; DB 2; Lengt Best Local Similarity 100.0%; Pred. No. 2.2e-75; Matches 126; Conservative 0; Mismatches 0; Inde	RESULT 1 US-08-912-227-2 IS Sequence 2, Application US/08912227 Patent No. 5998171 RAPLICANT: Yu, Guo-Liang APPLICANT: Ni, Jian APPLICANT: NOWNERS: 10 CORRESPONDENCE ADDRESS: ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L STREET: 1100 NEW YORK AVE., NW, SUITE 600 CORNERSPONDENCE ADDRESS: ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L STREET: 1100 NEW YORK AVE., NW, SUITE 600 COUNTRY: USA ZIP: 20005-3934 COMPUTER READABLE FORM: MEDIUM TYPE: Ploppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION NUMBER: US 60/024,058 FILING DATE: Herewith FILING DATE: Herewith FILING DATE: Herewith FILING DATE: HS-AUG-1996 ATPLICATION NUMBER: US 60/024,058 FILING DATE: LS-AUG-1996 ATPLICANTION PATA: APPLICATION NUMBER: US 60/024,058 FILING DATE: LS-AUG-1996 ATTORNEY/AGENT INFORMATION: NAME: Steffe, Eric K. REGISTRATION THFORMATION: TELEPHONE: 202-371-2600 TELEPHONE: 202-371-260 INFORMATION FOR SEG ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 169 amino acids TYPE: protein	ALIGNMENTS	28 69.5 10.3 984 2 US-08-184-009-120 29 69.5 10.3 984 2 US-08-458-356-120 30 69.5 10.3 984 3 US-08-450-736-120 31 69.5 10.3 984 4 US-09-535-370-120 32 69.5 10.3 984 4 US-09-633-667-120 33 69.5 10.3 989 3 US-08-213-419B-2 34 69.5 10.3 10.3 10.3 10.3 10.3 10.5 10.9-2535-370-120 35 69.5 10.3 10.3 10.3 10.9-02-533-419B-4 35 69.5 10.3 10.1 4 US-09-253-891-818 36 69 10.2 634 4 US-09-253-891-919 37 68.5 10.1 1604 3 US-09-04-838-95 38 68.5 10.1 3443 2 US-08-416-603-2 40 68.5 10.1 3623 4 US-09-048-838-95 41 67.5 10.0 28.9 4 US-09-322-409-6 42 67.5 10.0 26.0 4 US-09-322-409-65 44 67.5 10.0 26.0 4 US-09-322-409-65 45 67.5 10.0 26.0 4 US-09-322-409-65 46 67.5 10.0 26.0 4 US-09-589-287B-38
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US-09-513-584-2
                                                                   ; MOLECULE TYPE: US-09-513-584-2
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Query Match 100.0%; Score 675; DB 4; Best Local Similarity 100.0%; Pred. No. 2.2e-75; Matches 126; Conservative 0; Mismatches 0;
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                                                                                                                                           TELEFAX: 202-371-2540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/513,584
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APPLICATION NUMBER: US 05
FILING DATE: 01-JUL-1999
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                          REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 26-FEB-1999
PRIOR APPLICATION DATA:
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Human Endokine Alpha and Methods TITLE OF INVENTION: of Use NUMBER OF SEQUENCES: 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 08/912,227 FILING DATE: 15-AUG-1997
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CLASSIFICATION:
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ADDRESSEE: P.L.L.C
STREET: 1100 NEW YORK AVE., NW, SUITE 600
                                                                                                 TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
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                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                               NAME: Steffe, Eric K. REGISTRATION NUMBER:
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                                                                                                                                                                                                                                 Query Match
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SEQUENCE CHARACTERISTICS:
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 14
TELECOMMUNICATION IMFORMATION:
TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
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APPLICATION NUMBER:
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TOPOLOGY:
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STREET: 1100 NEW YORK AVE.,
CITY: WASHINGTON
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)GY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NPQFIS 126
                                        NPQFIS 126
          NPQFIS 169
                                                                                                                                                                                                                                                                                                                                   169 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                202-371-2540
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yu, Guo-Liang
Ni, Jian
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                  protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Craig A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Endokine Alpha
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SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/345,790
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PFEVRLYKNKDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 60
PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                PFEVRLYKNKDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
                                                                                                    ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                ETAKBPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                                                                                                                         100.0%; Score 675; DB 4;
100.0%; Pred. No. 2.2e-75;
tive 0; Mismatches 0;
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                                                                                                                                                                                                                                                             Length 169;
                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                               0;
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        163
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RESULT 4

US-09-107-532A-3959

; Sequence 3959, Application US/09107552...
; Patent NO. 6583275
; GENERAL INFORMATION:
    APPLICANT: Lynn A Doucette-Stamm and TITLE OF INVENTION: NUCLEIC ACID AND ENTEROCOCCUS FA
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                                                                                                                          US-09-248-796A-20671
                                                                                                                                                   RESULT 5
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                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                      Sequence 20671, Application US/09248796A Patent No. 6747137
                                                                   GENERAL INFORMATION:
APPLICANT: Keith Weinstock et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 3959:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: (B) LOCATION 1...
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/051571
FILING DATE: JULY 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Aziniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
FILING DATE: 14 May 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL: YES ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: CD/ROM IS09660
COMPUTER: PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
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ADDRESSE: GENOME THERAPEUTICS CORPORATION
                                                                                                                                                                                                              575
                                                                                                                                                                                                                                                                                          515
                                                                                                                                                                                                                                                  106 QVLKNN 111
                                                                                                                                                                                                                                                                                                                       51 APNANYNDVAPFEVRLYKNKDMIQTLTNKS-----KIQNVGGTYELHVGDTIDLIFNSEH 105
                                                                                                                                                                                                                                                                                     APNGYQLDSSEFSITVKENQNVTTTRINKKSTGSVEIEKIGDLDGLGLFNVVFTIYNSDN
                                                                                                                                                                                                            KVVKDN 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (781)893-5007
TELEFAX: (781)893-8277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Enterococcus faecium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 1221 amino acids
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COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Waltham
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                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                        12.5%;
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AND AMINO ACID SEQUENCES RELATING TO
FARCIUM FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                       4;
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US-08-496-944-2
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                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/08496944 Patent No. 6040496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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SEQ ID NO 20671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Law, Marcus I
APPLICANT: Dietz, Jon M
                                                                                                                                                          REFERENCE/DOCKET NUMBER: INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/074,725
PRIOR FILING DATE: 1998-02-13
PRIOR APPLICATION NUMBER: US 60/096,409
PRIOR FILING DATE: 1998-08-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/248,796A CURRENT FILING DATE: 1999-02-12
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OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 217
TYPE: PRT
ORGANISM: Candida
                                                                                  TOPOLOGY: li
                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Elmer, James Scott
REGISTRATION NUMBER: 36,129
                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: CIBA-Geigy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
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                                                                                                                           TYPE:
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 7 Skylin
CITY: Hawthorne
                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 10532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 PSKWQMASS--EPP-----CVNKVSDWKLEILQNGLYLIYGQVAP----NANYNDVAPF
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                                                                                                                         amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                NY
                                                                                                                                            2763 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 Skyline Drive
11.3%;
ilarity 25.8%;
Conservative 1
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                                                                                                                                                                                                                                                                       435
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27.2%;
                                                                                                                                                                                                                                                                                                     US/08/496,944
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; Score 76; DB
; Pred. No. 17;
18; Mismatches
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                                                                                                                                                                                             CGC 1814
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                                                                                                                                                                                                                                                                                                                                      Version
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                                 Length 2763;
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Matches

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PCT-US93-02475-6
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                                                                                                             Matches
                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/.
APPLICATION NUMBER: US 07/.
PILING DATE: 12 March 1992
ATTORNEY/AGENT INFORMATION:
NAME: Donald G. Lewis
REGISTRATION NUMBER: 28636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (619) 554-6312 INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: BJTTELECOMMUNICATION INFORMATION: TELEPHONE: (619) 554-2421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 13 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Wisnieski, Bernadine TITLE OF INVENTION: Tumor Necro TITLE OF INVENTION: Ion Channel
                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 157 amino acids
TYPE: AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                 PUBLICATION INFORMATION:
AUTHORS: McGraw, R. A., Coffee, B.W., Otto,
AUTHORS: C.M., Drews, R.T. and Rawling, C.A.
TITLE: Gene Sequence of Feline Tumor Necros
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: 19930
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: San Diego
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET:
                                                                                                                            Local Similarity
                                                                                                                                                                                              PAGES: 5564
DATE: 1990
RELEVANT RESIDUES IN SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE:
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                                                                                                                                                                                                                                                VOLUME:
                                                                                                                                                                                                                                                                 JOURNAL:
                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 KEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFE
       81
                                         42
                                                                       30 KVSDWKLEILQNGLYLIYGQV-----APNANY---NDVAPFEVRLYKNKDMIQTLINKS 80
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       KIQN-
                                       ELTDNQLKVPSDGLYLIYSQVLFTGQGCPSTHVLLTHAISRFAVSYQTKVNLLSAI--KS 99
                                                                                                                                                                                                                                                                                    Factor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wisnieski, Bernadine J.
                                                                                                                                                                                                                                                                    Nucleic Acids Research
                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                       Tumor Necrosis Factor (feline)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Word Perfect
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                                                                                                             Score 74; DB Pred. No. 0.45
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          -VGGTYELHVGDTID--
                                                                                                                                                                                                                                                                                                      Rawling, C.A.
Tumor Necrosis
                                                                                                                                                                                                  6: 1-157
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                                                                                                                             DB 5;
0.45;
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                                                                                                             32;
                                                                                                                                              Length 157;
                                                                                                               Indels
          -LIFNSEHQVLKNNTYWGI 116
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US-09-270-767-49088
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
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NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Reed, John C.
APPLICANT: Sato, Takaaki
TITLE OF INVENTION: CD40 Associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
                                                                                                                                                                                                                      COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-OOS
SOFTWARE: PATENTIA Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH: 235
                                                                                                                             CLASSIFICATION: 530
PRIOR APPLICATION NUMBER: US 08/349,357
APPLICATION NUMBER: US 08/349,357
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
             FILING DATE: 02-DEC-1994
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-LJ 1203
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                   CITY: San Diego
                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                               California
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4370 La Jolla Village I
                                                                                                                                                                                                                                                                                                                                                               USA
(619) 535-9001
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US-08-349-357-2
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Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/349,357
FILING DATE: 02-DEC-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: PLJ 1203
TELECOMMUNICATION INFORMATION:
TELECHONE: (619) 535-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 92122
COMPUTER PARABBLE FORM:
MEDIUM TYPE Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTWARE: PATENTIA Release #1.0, VE
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Reed, John C.
APPLICANT: Sato, Takaaki
TITLE OF INVENTION: CD40 Associated Proteins
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                              TELEFAX: (619) 535-8949
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (619) 535-8949 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                          MOLECULE TYPE: protein
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CTTY: San Diego
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les 28; Conserv
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 282
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                             71 DMIQTLTNKSKIONVGGTYELHVGDTIDLIFNSEHQVLK 109
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                                                                                                                                               Similarity
                                                                                                                                                                                                                                               amino acid
EMLR--NNESKI
                                                                                              ASSEPPCVNKVSDW-----KLEILQNGLYLIYGQVAPNAN----YNDVAPFEVRLYKNK 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: protein
                                                             ASSAVQHVNLLKEWSNSLEKKVSLLQN-----ESVEKNKSIQSLHNQICSFEIEIERQK 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         California
                                                                                                                                                                                                                                                                543 amino acids
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28.3%;
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                                                                                                                                             Score 74; DB 3; Pred. No. 2.7;
LHLQRVID
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                                                                                                                               24; Indels
                                                                                                                                                             Length 543
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                                                                                                                                                                                                                                                                                                                                                                           APPLICATION WE INSTOCK Et al
APPLICATI'S KEITH WEINSTOCK ET AL
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196,132
CURRENT APPLICATION NUMBER: US/09/248,796A
CURRENT FILING DATE: 1998-02-12
PRIOR APPLICATION NUMBER: US 60/074,725
PRIOR FILING DATE: 1998-02-13
PRIOR FILING DATE: 1998-08-13
NUMBER OF SEQ ID NOS: 28208
SEQ ID NO 1558
LENGTH: 289
TWORD: 15568
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Matches
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Patent No. 6482411
GENERAL INFORMATION:
APPLICANT: AHUZA, SEEMA
APPLICANT: BONEWALD, LYNDA
TITLE OF INVENTION: CD40 LIGAND AND CD40 AGONIST COMPOSITIONS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15058, Application US/09248796A Patent No. 6747137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                ORGANISM: Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                         Local
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       114 WGIILLANPQFI 125
                                                    197 RKSIHTLINNYKKFVQNIKTEADKYHWLTIIRANTTKIYQYIYSKLFYNSE--
                                                                                                                                            143 IAINKPSSISLATDLKYQVIPYFNGIY---
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                                                                                              70 KDMIQTLTNKSK--IQNV----
                                                                                                                                                                                      20 MASSEPPCVNKVSDWKLEILQ--NGLYLIYGQVAPNANYNDVAPFEVRLY------KN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71 DMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLK 109
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                                                                                                                                                                                                                                   30;
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                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                               10.8%; Score 73; DB 4; Length 289; ilarity 22.7%; Pred. No. 1.4; Conservative 23; Mismatches 37; Indels
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                                                                                                                                            --NPISSYVRIPKFSIPKYGITSEVFNPI 196
                                                                                                 -GGTYELHVGDTIDLIFNSEHQVLKNNTY 113
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Patent No. 6538176
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 6
LENGTH: 609
TYPE: PRT
ORGANISM: Xenopus laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application PC/TUS9302475 GENERAL INFORMATION:
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Best Local :
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CURRENT FILLING DATE: 1999-09-15
RUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Mahajan, Pramod B.
TITLE OF INVENTION: Maize Replication Protein A and
FILE REFERENCE: 5718-59
                TELEFAX: (619) 554-63 INFORMATION FOR SEQ ID NO:
                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/852,625
FILING DATE: 12 March 1992
ATTORNEY/AGENT INFORMATION:
NAME: Donald G. Lewis
                                                                         REFERENCE/DOCKET NUMBER: BUTTELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3
COMPUTER: VE System 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: TITLE OF INVENTION: NUMBER OF SEQUENCES:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                  SOFTWARE: Word Perfect CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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Local Similarity 24.3%; Pred. No. 5.
                                                                                                                                                                                                                                       FILING DATE: 1 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                   OPERATING SYSTEM:
                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                            APPLICATION NUMBER: POFILING DATE: 19930412
                                                        TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
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                                                          (619) 554-2421
                                     554-6312
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumor Necrosis Factor with Modified
                                                                                                                                                                                                                                                                               PCT/US93/02475
                                                                                                                   28636
                                                                                                                                                                                                                                                                                                                                                                                 3.5 inch, 1.44 M storage
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                                                                                                  BJW-2
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Query Match
Best Local Similarity
Matches 33; Conserva
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US-09-710-279-606
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                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 606, Application US/09710279 Patent No. 6703492
                                                                                                             Matches
                                                                                                                            Best Local Similarity
                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/164,258
PRIOR FILING DATE: 1999-11-09
NUMBER OF SEQ ID NOS: 4472
                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/710,279
CURRENT FILING DATE: 2000-11-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: KIMMERLY, WILLIAM JOHN
TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: PU3480US
                                                                                                                                                                                                 FEATURE: OTHER INFORMATION: Description of Artificial Sequence: synthetic OTHER INFORMATION: amino acid sequence
                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                            LENGTH: 620
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PUBLICATION INFORMATION:
AUTHORS: Pauli, U. Beutler, B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
    NAME/KEY: Tumor Necrosis Factor (porcine)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
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DATE: 1989
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL:
                                    450 NEWORI-----MMSQQRFKVLANGFVELYGYVTINVDR-----DVTVGINENIVON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   102 NSEHQVLKNNTYWGIILL 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87 YOTKVNLLSAI--KSPCORETPEGAEAKPWYEPIYLGGVFQLEKDDRLSAEINLPDYLDF 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27 QWQSGYANALLANGVKLKDNQLVVPTDGLYLIYSQVLFRGQGCPSTNVFLTHTISRIAVS 86
                                                                        16 SKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        66 LYKNKDMIQTLTNKSKION---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 KWQMASSEPPCVN--KVSDWKLEILQNGLYLIYGQV-----APNANY---NDVAPFEVR 65
76 L----TNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQ 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Porcine Tumor Necrosis Factor-': Cloning with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 185-191
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                                                                                                         10.5%; Score 71; DB 4; Length 620 23.0%; Pred. No. 7.8; tive 20; Mismatches 33; Indels
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Pred. No.
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Result
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Maximum DB seq length: 200000000
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Perfect score:
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1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
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Listing first 45 summaries
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// Ggn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
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                                                        US-10-136-511-2
US-10-080-455-1
US-10-16-378-16
US-10-151-882-39
US-10-218-547-40
US-10-310-793-44
US-10-338-083-17
US-10-611-399-17
                                                                                                                                                                                                                            US-09-345-790-2
                       US-09-815-242-12610
US-09-757-041-2
                                                                                                                                                                                                                                                                                                                       SUMMARIES
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Sequence 2, Appli
Sequence 2, Appli
Sequence 1, Appli
Sequence 16, Appli
Sequence 39, Appl
Sequence 40, Appl
Sequence 40, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 12610, A
Sequence 2, Appli
Sequence 35, Appli
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US-10-297-942-2	0-437-963	-10-474-776	0-282-122	5-242-	0-282-122A-71	-10-295-074-4	-10-295-027-	-10-154-759-1	-10-154-759-1	0-154-759-1	-10-154-759-1	-10-437-963-1	-10-372-553-	-10-375-553-	-10-371-558-	-10	-10-424-599-2	-10-295-074-5	-10-295-074-	US-10-295-074-51	-10-295-074-	-10-424-599-23192	0-437-963-	-10-437-963-18431	-10-042-865-16	-10-004-	-17	US-08-813-323A-2	-207-65	S-10-242-21	US-08-813-323A-1
Sequence 2, Appli	equence 159310,	e 710,	ce 74118	Sequence 13477, A	ŧл	e 42,	асе	ence 17,	e 15,	e 18,	equence 16,	e 153	<u>.</u>	6	e 6,	e 6, 1	e 2094	e 53,	e 59,	e 51	e 49,	equence 231929	equence 125464	e 1843	e 166,	e 36,	ce 17	ν,	e 10	equence 7, App	Sequence 1, Appli

ALIGNMENTS

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US-09-345-790-2; Sequence 2, Application US/09345790; Patent No. US20020099198A1
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                                                                                                                                                                                                                                                                                                 ZIP: 20005-333.
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
MEDIUM TYPE: PC-poy disk
MEDIUM TYPE: PC-pos/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: 1
APPLICANT: 1
                               NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36,688
REFERENCE/DOCKET NUMBER: 148
TELECOMMUNICATION INFORMATION:
                                                                         APPLICATION NUMBER: 08/9
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
REGISTRATION NUMBER: 36/
                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/345,790
                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: STERNE, KESSLER,
STERET: 1100 NEW YORK AVE.,
CITY: WASHINGTON
                                                                                                                                                                               CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Human Endokine Alpha NUMBER OF SEQUENCES: 10
                     TELEPHONE:
                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 20005-3934
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Ni, Jian
Rosen, Craig A.
202-371-2540
                     202-371-2600
                                                                                                                                                            08/912,227
                                                             1488.0470001
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INFORMATION FOR SEQ ID NO:

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; Sequence 2, Application US/10136511
; Publication No. US20020168729A1
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APPLICANT: Yu, Guo-L:
APPLICANT: Ni, Jian
APPLICANT: Rosen, Ci
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Best Local Similarity 100.0%;
Matches 126; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn version 3.0 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/122,099
PRIOR FILING DATE: 1999-02-26
PRIOR APPLICATION NUMBER: 08/912,227
PRIOR FILING DATE: 1997-08-15
PRIOR APPLICATION NUMBER: 60/024,058
PRIOR APPLICATION NUMBER: 60/024,058
PRIOR FILING DATE: 1996-08-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: 1488.0470007/EKS/PSC CURRENT APPLICATION NUMBER: US/10/136,511 CURRENT FILING DATE: 2002-05-02 PRIOR APPLICATION TO THE PRIOR APPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/513,584
PRIOR FILING DATE: 2000-02-25
PRIOR APPLICATION NUMBER: 09/345,790
PRIOR FILING DATE: 1999-07-01
PRIOR APPLICATION NUMBER: 60/136,788
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
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LENGTH: 169 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                        ; Local Simi
ches 126;
                                                                                    104 PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
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                                                                                                                                                                    PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
NPQFIS 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 60
                                                                                                                                                                                                                                                        ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 675; DB 13; 100.0%; Pred. No. 3.1e-67;
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Pred. No. 3.1e-67;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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                                        SEQ ID NO 16
LENGTH: 177
TYPE: PRT
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APPLICANT: Ashkenazi, Avi J.
APPLICANT: Baker, Kevin P.
APPLICANT: Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
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LENGTH: 177
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Publication No. US20020146389A1
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APPLICANT:
                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/116,378

CURRENT FILING DATE: 2002-04-04

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/247,225

PRIOR FILING DATE: EARLIER FILING DATE: 1999-02-09

PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US 60/074,0

PRIOR FILING DATE: EARLIER FILING DATE: 1998-02-09

NUMBER OF SEQ ID NOS: 31
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                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: NOVEL TUMOR NECROSIS FACTOR RECEPTOR HOMOLOG
TITLE OF INVENTION: NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P1206R1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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TYPE: PRT
ORGANISM: Homo sapiens
ORGANISM: Homo sapiens
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Pitti, Robert M.
Wood, William
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Godowski, Paul J.
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Pitti, Robert M.
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100.0%; Pred. No. 3.3e-67;
tive 0; Mismatches 0;
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RESULT 6
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 39
LENGTH: 177
TYPEP.
                                                                                                                                                                                                       Sequence 40, Application US/10218547 Publication No. US20030100074A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; S
Best Local Similarity 100.0%; F
Matches 126; Conservative 0;
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                                                                                                    FILE REFERENCE: PF561
CURRENT APPLICATION NUMBER: US/10/218,547
CURRENT FILING DATE: 2002-08-15
                                                                                                                                                    APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Methods And Compositions
TITLE OF INVENTION: Human Endokine Alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: PF554
CURRENT APPLICATION NUMBER: US/10/151,882
CURRENT FILING DATE: 2002-05-22
PRIOR APPLICATION NUMBER: 60/293,100
PRIOR FILING DATE: 2001-05-24
                                PRIOR APPLICATION NUMBER: 60/312,542
PRIOR FILING DATE: 2001-08-16
PRIOR APPLICATION NUMBER: 60/330,761
PRIOR FILING DATE: 2001-10-30
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                    NUMBER OF
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 SEQ ID NOS:
PatentIn ver
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Pred. No. 3.3e-67;
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Pred. No. 3.3e-67;
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US-10-310-793-44
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT FILING DATE: 2002-12-06
pRIOR APPLICATION NUMBER: 60/336,695
pRIOR FILING DATE: 2001-12-07
pRIOR APPLICATION NUMBER: 10/226,294
pRIOR FILING DATE: 2002-08-23
pRIOR APPLICATION NUMBER: 60/314,381
pRIOR FILING DATE: 2001-08-24
pRIOR FILING DATE: 2001-08-24
pRIOR FILING DATE: 2001-08-24
pRIOR FILING DATE: 2001-08-24
pRIOR APPLICATION NUMBER: 09/899,059
                                                                                                                                                                                                                              SOFTWARE: Pa
                                                               Matches
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Publication No. US20030198640A1
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                                                                                                      Query Match
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Best Local
                                                                                                                                                                                                                                                 Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 71
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2000-07-07
PRIOR APPLICATION NUMBER: 09/559,290
PRIOR FILING DATE: 2000-04-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Methods and Compositions For Treating Inflammatory Bowel Diseases TITLE OF INVENTION: Relating To Human Tumor Necrosis Factor-Gamma Beta FILE REFERENCE: PF573
CURRENT APPLICATION NUMBER: US/10/310,793
CURRENT FILING DATE: 2002-12-06
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APPLICANT: Ni, Jian
                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/132,227 PRIOR FILING DATE: 1999-05-03
                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1999-05-13
                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/134,067
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/216,879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2001-07-06
PRIOR APPLICATION NUMBER: 60/278,449
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                                                            100.0%; Score 675; DB 14; ilarity 100.0%; Pred. No. 3.3e-67; Conservative 0; Mismatches 0;
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Вb

52

ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 111

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                                        US-10-338-083-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn version 3.0 SEQ ID NO 40
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                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17, Application US/10338083 Publication No. US20030166559A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                             SOFTWARE: POSEQ ID NO 17
Query Match
                                                                                                                                                                                                                                                                                                                    APPLICANT: Desjarlais, John R.
APPLICANT: Tansey, Malu Lourdes G.
APPLICANT: Dahiyat, Bassil I.
TITLE OF INVENTION: Dominant Negative Proteins and Methods Thereof
FILE REFERENCE: A-71273-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/307,838 PRIOR FILING DATE: 2001-07-27 NUMBER OF SEQ ID NOS: 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: PF559
CURRENT APPLICATION NUMBER: US/10/202,062
CURRENT FILING DATE: 2002-07-25
                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/338,083
CURRENT FILLING DATE: 2003-01-16
PRIOR APPLICATION NUMBER: US 60/345,805
PRIOR FILING DATE: 2002-01-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Human Genome Sciences, Inc.,
TITLE OF INVENTION: Heteromultimeric TNF Ligand Family members
                                                                                                                                                                         NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                           PRIOR FILING DATE: 2002-04-17
                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/373,453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: human
                                                              TYPE: PRT
ORGANISM: Homo sapiens
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                                                                                                    ENGTH: 113
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                                                                                                                                                 PatentIn version 3.2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 171
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NPOFIS 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 675; DB 15; illarity 100.0%; Pred. No. 3.3e-67; Conservative 0; Mismatches 0;
  90.1%;
    Score 608;
    DB 14;
    Length 113;
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APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR APPLICATION NUMBER: 60/191,078

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR APPLICATION NUMBER: 60/206,848

PRIOR FILING DATE: 2000-05-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; LENGTH: 113
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-611-399-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
US-10-611-399-17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 12610, Application US/09815242
Patent No. US20020061569A1
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PRIOR PILING DATE: 2002-01-04
PRIOR APPLICATION NUMBER: US 60/373,453
PRIOR FILING DATE: 2002-04-17
NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Desjarials, John R.
APPLICANT: Tansey, Malu Lourdes G.
APPLICANT: Dahiyat, Bassil I.
TITLE OF INVENTION: DOMINANT NEGATIVE PROTEINS
                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT FILING DATE: 2003-07-01
PRIOR APPLICATION NUMBER: US 10/338,083
PRIOR FILING DATE: 2003-01-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/611,399
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: A-71273-3
                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Haselbeck, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67 YKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILL 119
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                                                                                                                                                                                                                                                                    Ohlsen, Kari L.
Zyskind, Judith W.
Wall, Daniel
Trawick, John D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CMAKEGPLPSKWOMASSEPPCVNKVSDWKLEILONGLYLIYGQVAPNANYNDVAPFEVRL 66
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No. US20040170602A1
                                                                                                                                                                                                                                                  Carr, Grant J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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RESULT 12
US-09-757-041-2
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PRIOR APPLICATION NUMBER: 60/253,625
                                                                                                TELEFAX: (619) 535-89
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
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PRIOR APPLICATION NUMBER: 60/257,931
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Campbell and Flores
STREET: 4370 La Jolla Village Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Reed, John C.
APPLICANT: Sato, Takaaki
TITLE OF INVENTION: CD40 Associated Proteins
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                CLASSIFICATION: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: LEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
MOLECULE TYPE:
                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION: NAME: Campbell, Cathryn
                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ENGTH:
                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                            TELECOMMUNICATION INFORMATION:
                                                                                                                                                                           NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 4370 La
CITY: San Diego
                                     TOPOLOGY:
                                                  TYPE: amino acid
                                                                                                                                       TELEPHONE:
                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
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                                                                  LENGTH:
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FILING DATE: 2000-05-26
APPLICATION NUMBER: 60/242,578
FILING DATE: 2000-10-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        997 NNTTNDSQSKHV----SIHVGK----ISEDAHPIVLGNT--EKVVVVNPTAVS 1039
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74 QTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS 126
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Similarity 27.4%;
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SEQ ID NOS: 14110
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                                                                    543 amino acids
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                protein
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535-8949
310: 2:
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Pred. No. 3.5e+02;
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RESULT 13
US-10-004-378A-35
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Best Local :
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                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/004,378A CURRENT FILING DATE: 2001-10-24 PRIOR APPLICATION NUMBER: 60/242,882 PRIOR FILING DATE: 2000-10-24 PRIOR APPLICATION NUMBER: 60/242,765 PRIOR FILING DATE: 2000-10-24 PRIOR FILING DATE: 2000-10-24
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APPLICANT:
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PRIOR FILING DATE: 2001-06-22
PRIOR APPLICATION NUMBER: 60/242,789
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Ellerman, Karen
APPLICANT: Gangolli, Esha A
TITLE OF INVENTION: No. US20030228301A1el
TITLE OF INVENTION: Methods of Using the
FILE REFERENCE: 21402-179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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                                              PRIOR APPLICATION NUMBER: 60/243,950 PRIOR FILING DATE: 2000-10-27
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FILING DATE: 2000-10-24
APPLICATION NUMBER: 60/242,768
FILING DATE: 2000-10-24
APPLICATION NUMBER: 60/242,767
                                                                                             APPLICATION NUMBER: 60/243,591
                                                                                                               APPLICATION NUMBER: 60/273,047 FILING DATE: 2001-03-02
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APPLICATION NUMBER: 60/243,622
                                                                                FILING DATE:
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               Prior Application SEQ ID NOS: 191
PatentIn Ver.
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Gunther, Erik
Stone, David J
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Tchernev, Velizar
Vernet, Corrine A
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US-08-813-323A-1
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LENGTH: 543
TYPE: PRT
ORGANISM: Homo sapiens
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Publication No. US20020031522A1
GENERAL INFORMATION:
APPLICANT: Baltimore, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 11.0%; Score 74; DB 14; Length 543; Best Local Similarity 28.3%; Pred. No. 23; Matches 28; Conservative 17; Mismatches 24; Indels
                                                                                 Matches
                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (212) 278-0400
TELEFAX: (212) 391-0525
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: White, John P
REGISTRATION UNBER: 28,678
REFERENCE/DOCKET NUMBER: 5065
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/813,323A
APPLICATION NUMBER: US/08/813,323A
                                                                                                                                                                                                  FEATURE:
NAME/KEY:
                                                                                                                                                                                                                                               MOLECULE TYPE:
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LENGTH: 566 amino acids
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TITLE OF INVENTION: TRUNCATED CRAF1 INHIBITS CD40 SIGNALING
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                                                                                                                                                                                                                                                                    TOPOLOGY:
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                                                                                                                                                                                                                                                                                                               TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: Cooper & Dunham, LLP STREET: 1185 Avenue of the Americas
                                                                                                                                                                                   LOCATION:
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252 ASSAVQHVNLLKEWSNSLEKKVSLLON-----ESVEKNKSIQSLHNQICSFEIEIERQK 305
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Cleary, Aileen
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ilarity 28.3%;
Conservative 1:
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Search completed: November Job time: 127 secs
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US-10-242-212-7
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US-10-242-212-7
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                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn version 3.0 SEQ ID NO 7
                                                                                                                                                                                                                                                              Query Match 11.0%; Score 74; DB Best Local Similarity 28.3%; Pred. No. 25; Matches 28; Conservative 17; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: AHUJA, SEEMA
APPLICANT: BONEWALD, LYNDA
APPLICANT: BONEWALD, LYNDA
TITLE OF INVENTION: CD40 LICAND AND CD40 AGONIST COMPOSITIONS AND
TITLE OF INVENTION: METHODS OF USE
TILE REFERENCE: 4003.001000
CURRENT FILING DATE: 2002-09-12
CURRENT FILING DATE: 2002-09-12
PRIOR APPLICATION NUMBER: US/09/645,926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2000-08-24
NUMBER OF SEQ ID NOS: 7
                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH: 567
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                                                                                       306 EMLR--NNESKI----
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                                                                                                                                                                                                                                                                 17; Mismatches
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Maximum Match 100%
Listing first 45 s
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Perfect score:
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gn2_6/ptodata/1/paa/USO7_COMB.pep:*
gn2_6/ptodata/1/paa/USO7_COMB.pep:*
gn2_6/ptodata/1/paa/USO7_COMB.pep:*
gn2_6/ptodata/1/paa/USO16_COMB.pep:*
gn2_6/ptodata/1/paa/USO18_COMB.pep:*
gn2_6/ptodata/1/paa/USO18_COMB.pep:*
gn2_6/ptodata/1/paa/USO18_COMB.pep:*
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gn2_6/ptodata/1/paa/USO18_COMB.pep:*
gn2_6/ptodata/1/paa/USO19_COMB.pep:*
gn2_6/ptodata/1/paa/USO19B_COMB.pep:*
gn2_6/ptodata/1/paa/USO19B_COMB.pep:*
gn2_6/ptodata/1/paa/USO19B_COMB.pep:*
gn2_6/ptodata/1/paa/USO19B_COMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

RESULT 1 PCT-US00-04 ; Sequence ; Sequence ; GENERAL APPLIC ; APPLIC TITLE NUMBER CORRESS ADDR STRA COUN ZIP: COMPUT: MEDI COMEDI COMED		44 5	41	40 40	ا 7 د 2 م	י טיע טיטיט	33 4 4	31 32	30 30	28	26	214	22 23	20 21	19	17	16 15	14	12	10 11	· • •	9 7	0.1	4. R	ωĸ	,
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n PC/TUS0004722 nome Sciences, Inc. raig A. Human Endokine Alpha and Methods SS: SKESSLER, GOLDSTEIN & FOX P.L.L.C YORK AVE., NW, SUITE 600 RM: RM: py disk compatible pc-DoS/MS-DOS	ALIGNMENTS	25 US-09-950-084-4591 1 PCT-US02-03987-12610 23 US-09-815-242-12610	US-08-827-356-5567	US-09-490-190-2	US-09-513-996A-54421 US-60-389-898-369	US-60-096-409-20671	US-09-513-996A-54423 US-10-603-113-20671	US-60-581-351-10793 US-10-415-182A-1042	US-10-417-884-3959 US-10-417-884A-3959	US-09-817-076-897 US-10-853-032-2	US-09-307-140-897	US-10-611-399-17	US-10-853-032-9 US-10-338-083-17	US-10-442-108-5 US-10-713-391-1	US-10-405-027-3007	US-10-218-547-40	US-10-170-205E-28226	US-10-116-3/8-16 US-10-151-882-39	US-10-080-455-1	US-09-613-972-14	US-09-247-225-16	PCT-US02-25809-40	PCT-US02-23782-40	PCT-US01-46625-3	PCT-US96-13282-2 US-10-136-511-2	S00-04722-
of Use		4591, 2610, 12610,	55	Sequence 2, Appli	Sequence 54421, A	Sequence 20671, A	Sequence 54423, A	Sequence 10793, A	ω ω 9	Sequence 897, App Sequence 2, Appli	89	Sequence	Sequence 9, Appli				2822	39,	, 1	14,	16	40,	Sequence 40, Appl	3, Appli	equence 2, Appl Sequence 2, App	

SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:

PatentIn Release #1.0, Version #1.30

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; MOLECULE TYPE: protein PCT-US00-04722-2
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Best Local Similarity
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                                                        COUNTRY: USA
ZIP: 20005-3934
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPETARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US96/13282
APPLICATION NUMBER: PCT/US96/13282
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LENGTH: 169 amino acids
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                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Rosen, Craig A.
TITLE OF INVENTION: Human Endokine Alpha
NUMBER OF SEQUENCES: 10
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APPLICANT:
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ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS
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REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
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                     CLASSIFICATION:
                                           FILING DATE:
                                                                                                                                                                                                                                                                          CITY: WASHINGTON
                                                                                                                                                                                                                                                                                         ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C STREET: 1100_NEW_YORK AVE., NW, SUITE 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Rockville, MD 20850
United States of America
APPLICANTS/INVENTORS: Yu, Guo-Liang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human Genome Sciences, Inc
9410 Key West Avenue
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RESULT 3
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LENGTH: 169
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 09/513,584
PRIOR FILING DATE: 2000-02-25
PRIOR APPLICATION NUMBER: 09/345,790
PRIOR FILING DATE: 1999-07-01
PRIOR APPLICATION NUMBER: 60/136,788
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1999-05-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Yu, Guo-Liang
APPLICANT: Ni, Jian
APPLICANT: Rosen, Craig
                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/122,099
PRIOR FILING DATE: 1999-02-26
PRIOR APPLICATION NUMBER: 08/912,227
PRIOR FILING DATE: 1997-08-15
PRIOR APPLICATION NUMBER: 60/024,058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 1488.0470007/EKS/PSC CURRENT APPLICATION NUMBER: US/10/136,511 CURRENT FILING DATE: 2002-05-02
                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1996-08-16 NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Rosen, Craig A. TITLE OF INVENTION: Human Endokine Alpha and Methods of Use
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TELECOMMUNICATION INFORMATION:
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104 PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                                                                                  126; Conservative
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                         61 PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
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                                                                                44 ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                                                          1 ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAFNANYNDVA 60
                                                                                                                                                              h 100.0%; Score 675; DB 27; Similarity 100.0%; Pred. No. 8.3e-71; O. Mismatches 0;
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GENERAL INFORMATION:
APPLICANT: Genaissance Pharmaceuticals, Inc.
APPLICANT: Bentivegna, Steven C
APPLICANT: Bieglecki, Karyn M
APPLICANT: Sun, Xiao
TITLE OF INVENTION: HAPLOTYPES OF THE TNFSF18 GENE
                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn version 3.0 SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 39, Application PC/TUS0216106
GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Antibodies Against Tumor Necrosis Factor Delta (APRIL)
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                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: PF554PCT
CURRENT APPLICATION NUMBER: PCT/US02/16106
CURRENT FILING DATE: 2002-05-22
PRIOR APPLICATION NUMBER: 60/293,100
PRIOR FILING DATE: 2001-05-24
NUMBER OF SEQ ID NOS: 48
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NUMBER OF SEQ ID NOS: 21
SOFTWARE: PatentIn version 3.1
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CURRENT FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: 60/247,501
PRIOR FILING DATE: 2000-11-10
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                             LENGTH: 177
TYPE: PRT
                                                                                                                                                                                                                      ORGANISM: Homo sapiens
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Local Similarity 100.0%;
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                                        ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
                                                                            ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 60
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                                                                                                                      Conservative
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                                                                                                                                       100.0%; Score 675; DB 1; 100.0%; Pred. No. 8.8e-71;
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                                                                                                                                                          Length 177;
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SEQ ID NO 40
SEQ IT NO 40
TYPE: PRT
TYPE: PRT
ORGANISM: human
                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 57
SOFTWARE: PatentIn version 3.1
SEQ ID NO 40
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                                                                                    Matches 126;
                                                                                                        Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: PCT/US02/25809
CURRENT FILING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: 60/312,542
PRIOR FILING DATE: 2001-08-16
PRIOR APPLICATION NUMBER: 60/330,761
PRIOR APPLICATION NUMBER: 60/330,761
PRIOR FILING DATE: 2001-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: PCT/US02/23782
CURRENT FILING DATE: 2002-07-25
PRIOR APPLICATION NUMBER: 60/307,838
PRIOR FILING DATE: 2001-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: Methods And Compositions For Treating Metabolic Bone Diseases Rel
TITLE OF INVENTION: Human Endokine Alpha
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                                                                                                                                                                                        TYPE: PRT ORGANISM: human
                                                                                                                                                                                                                                LENGTH: 177
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  ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
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                                                                                    Conservative
                                                                                  100.0%; Score 675; DB 1;
100.0%; Pred. No. 8.8e-71;
tive 0; Mismatches 0;
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                                                                                                                        Length 177;
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; Sequence 16, Application US/09247225A; GENERAL INFORMATION:

APPLICANT: Ashkenazi, Avi J.

APPLICANT: Goddard, Audrey

APPLICANT: Gurney, Austin

APPLICANT: Marsters, Scot A.

APPLICANT: Pitti, Robert M.

APPLICANT: Wood, William
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APPLICANT: Baker, Kevin P.
APPLICANT: Godowski, Paul J.
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Mark, Melanie R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-195-368-1
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US-09-195-368-1
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NUMBER OF SEQ ID NOS: 31
SEQ ID NO 16
LENGTH: 177
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SEQ ID NO 1
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APPLICANT: Marsters, Scot A.
APPLICANT: Ditti, Robert M.
TITLE OF INVENTION: DNA19355 Polypeptide, A Tumor Necrosis Factor Homolog
FILE REFERENCE: P1150R2
CURRENT APPLICATION NUMBER: US/09/195,368A
CURRENT FILING DATE: 1998-11-18
EARLIER APPLICATION NUMBER: US 60/069,661
EARLIER FILING DATE: 1997-12-12
EARLIER APPLICATION NUMBER: US 60/065,635
EARLIER FILING DATE: 1997-11-18
                                                                        CURRENT APPLICATION NUMBER: US/09/247,225A CURRENT FILING DATE: 1999-02-09 EARLIER APPLICATION NUMBER: US 60/074,087 EARLIER FILING DATE: 1998-02-09
                                                                                                                                                                                 TITLE OF INVENTION: NOVEL TUMOR NECROSIS FACTOR RECEPTOR HOMOLOG AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P1206R1
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RESULT 10
US-09-613-972-14
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; ORGANISM: Homo
US-09-247-225-16
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                                                                                                                                                                                                                                      ; Sequence 14, Application US/09613972A ; GENERAL INFORMATION:
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SEQ ID NO 14
LENGTH: 177
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Best Local
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APPLICANT: P. Mickey Williams
APPLICANT: Mary E. Gerritsen
TITLE OF INVENTION: PROMOTION OR INHIBITION OF ANGIOGENESIS AND
TITLE OF INVENTION: CARDIOVASCULARIZATION BY TUMOR NECROSIS FACTOR
TITLE OF INVENTION: LIGAND/RECEPTOR HOMOLOGS
FILE REFERENCE: P1765R1
CURRENT APPLICATION NUMBER: US/09/613,972A
CURRENT FILING DATE: 2000-07-11
PRIOR APPLICATION NUMBER: US 60/143,304
PRIOR FILING DATE: 1999-07-12
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APPLICANT: Mary E. Gerritsen
TITLE OF INVENTION: PROMOTION OF INHIBITION OF ANGIOGENESIS AND
TITLE OF INVENTION: CARDIOVASCULARIZATION BY TUMOR NECROSIS FACTOR
TITLE OF INVENTION: LIGAND/RECEPTOR HOMOLOGS
FILE REFERENCE: PJ76SR1
CURRENT APPLICATION NUMBER: US/09/613,972
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PRIOR APPLICATION NUMBER: US 60/143,304
PRIOR FILING DATE: 1999-07-12
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les 126; Conser
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                                                                                                                                                                                                                                                                                                                                                                              172 NPQFIS 177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tch 100.0%; Score 675; DB 20; al Similarity 100.0%; Pred. No. 8.8e-71; 126; Conservative 0; Mismatches 0;
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RESULT 13
US-10-116-378-16
; Sequence 16, Application US/10116378
; GENERAL INFORMATION:
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CURRENT FILING DATE: 2002-02-22;
PRIOR APPLICATION NUMBER: 09/195,368
PRIOR FILING DATE: 1998-11-18
PRIOR APPLICATION NUMBER: US 60/069,661
PRIOR FILING DATE: 1997-12-12
PRIOR APPLICATION NUMBER: US 60/065,635;
PRIOR FILING DATE: 1997-11-18
NUMBER OF SEQ ID NOS: 8
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SEQ ID NO 14
LENGTH: 177
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APPLICANT: Godowski, I
APPLICANT: Gurney, Au
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LENGTH: 177
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Best Local :
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TITLE OF INVENTION: DNA19355 Polypeptide,
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TYPE: PRT
ORGANISM: Homo sapiens
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ORGANISM: Homo
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Gurney, Austin L.
Mark, Melanie R.
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Conservative 0;
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Pred. No. 8.8e-71;
; Mismatches 0;
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US-10-151-882-39
US-10-151-882-39
; Sequence 39, Application US/10151882
; GENERAL INFORMATION:
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LENGTH: 177
                                                                                                                                                                                                          Query Match 100.0%; Score 675; DB 27; Best Local Similarity 100.0%; Pred. No. 8.8e-71; Matches 126; Conservative 0; Mismatches 0;
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CURRENT FILING DATE: 2002-05-22
PRIOR APPLICATION NUMBER: 60/293,100
                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-0
NUMBER OF SEQ ID NOS: 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Ruben, Steven M.
TITLE OF INVENTION: Antibodies Against Tumor Necrosis Factor Delta (APRIL)
FILE REFERENCE: PF554
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CURRENT APPLICATION NUMBER: US/10/116,378
CURRENT FILING DATE: 2002-04-04
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TITLE OF INVENTION: NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
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APPLICANT: Gurney, Austin
APPLICANT: Marsters, Scot A.
APPLICANT: Pitti, Robert M.
APPLICANT: Wood, William
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ORGANISM: Homo sapiens
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121 NPQFIS
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                                                                   61 PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 60
                                                                                                                                                 1 ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA 60
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                                         PFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA
                                                                                                                            ETAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 675; DB 27; 100.0%; Pred. No. 8.8e-71;
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RESULT 15
US-10-170-205E-28226
US-10-170-205E-28226
Sequence 28226, Application US/10170205E
GENERAL INFORMATION:
APPLICANT: ADAMS, Mark
TITLE OF INVENTION: DEVICES, SUCH AS ARRAYS, COMPRISED OF HUMAN PROTEINS OR PROTEIN
TITLE OF INVENTION: CAPTURE AGENTS, AND USES THEREOF
FILE REFERENCE: CL001381
CURRENT APPLICATION NUMBER: US/10/170,205E
CURRENT FILING DATE: 2002-06-13
NUMBER OF SEQ ID NOS: 40312
SOFTWARE: PatentIn version 3.2
SOFTWARE: PatentIn version 3.2
Search completed: November 2, Job time: 462 secs
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-170-205E-28226
                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 675; DB 27; Length 177; Best Local Similarity 100.0%; Pred. No. 8.8e-71; Matches 126; Conservative 0; Mismatches 0; Indels 0;
                                                                       172 NPOFIS 177
                                                                                                                                                61 PFEVRLYKNKDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLA 120
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                                                                                                            121 NPQFIS 126
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seg length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
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Pending_Patents_AA_New:*

1: /cgn2_6/ptodata/1/paa/PCT_NEW_COMB.pep:*

2: /cgn2_6/ptodata/1/paa/US06_NEW_COMB.pep:*

3: /cgn2_6/ptodata/1/paa/US07_NEW_COMB.pep:*

4: /cgn2_6/ptodata/1/paa/US08_NEW_COMB.pep:*

5: /cgn2_6/ptodata/1/paa/US09_NEW_COMB.pep:*

6: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep:*

7: /cgn2_6/ptodata/1/paa/US11_NEW_COMB.pep:*

8: /cgn2_6/ptodata/1/paa/US10_NEW_COMB.pep:*
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Gapop 10.0 , Gapext 0.5
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675
1 ETAKEPCMAKFGPLPSKWQM......VIKNNTYWGIILLANPQFIS 126
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Sequence 138, App	147,	Sequence 1, Appli	,1	Sequence 1, Appli	1, 1	Sequence 28, Appl	1, 1	11	е 8,	e 13	e 123,	12	16,	Sequence 15, Appl	Sequence 11, Appl	Sequence 9, Appli	Sequence 24, Appl	e 24,	e 24, 🌶	e 145,	Sequence 181, App	e 158:	e 17,	ce 16, Ap	Description

RESU US-1 ; Se ; GE ; A	Qy Db	Db Qy	D Qq	Que Bes Mat	RESULT US-10- US-10- APP APP APP APP APP APP APP APP APP AP		
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107 R.		TLTNKS	SKWQMAS	0%;	S/1095 J. J. ey n t A. M. TUMOR TUMOR S ENCO) 4-10-0 US/09 2-09 US 60 2-09		
94751		KIQNVGGTYELHVGDTID	SEPPCVNKVSDWKLE	Score 675; DB 6; Pred. No. 1.4e-69 0; Mismatches 0	ROSIS FACTOR THE SAME 59,537 ,225	ALIGNMENTS	US-10-668-178-2 US-10-970-713-286 US-10-970-713-306 US-10-948-576-144 US-10-948-576-128 US-10-948-576-129 US-10-948-576-129 US-10-948-576-129 US-10-948-576-139 US-10-948-576-141 US-10-948-576-141 US-10-948-576-141 US-10-948-576-141 US-10-948-576-121 US-10-948-576-121 US-10-948-576-121 US-10-948-576-121
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		EHQVLXNNTYWGIILLA 	ILQNGLYLIYGQVAPNANYNDVA 	h 177; ls 0; Gaps	HOMOLOG AND		Sequence 2, Ap Sequence 306, Sequence 144, Sequence 128, Sequence 128, Sequence 139, Sequence 5, Ap Sequence 2, Ap Sequence 211, Sequence 2, Ap Sequence 4, Ap Sequence 5, Ap Sequence 3, Ap Sequence 13, Ap Sequence 13, Ap Sequence 13, Ap Sequence 13, Ap Sequence 13, Ap
		1 120	1 111	0;	NUCLEIC		Appli Appli App App App App App App App App App Ap

Thomason, Adam Read

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Sequence 15820, Application US/10220366A

GENERAL INFORMATION:

APPLICANT: HYSEQ, INC

TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides

FILE REFERENCE: 21272-042

CURRENT APPLICATION NUMBER: US/10/220,366A

CURRENT FILING DATE: 2002-08-28

PRIOR APPLICATION NUMBER: 09/577,409

PRIOR APPLICATION NUMBER: 09/577,409

PRIOR APPLICATION NUMBER: 09/515,126

PRIOR FILING DATE: 2001-02-3

INUMBER: OF SEQ ID NOS: 27802
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                                                                                                                                                                                                                                                             ; NAMB/KEY: misc feature
; LOCATION: (1)...(137)
; OTHER INFORMATION: Xaa = any amino acid or nothing
US-10-220-366A-15820
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/794,751
CURRENT FILING DATE: 2004-03-05
PRIOR APPLICATION NUMBER: US 10/338,083
PRIOR FILING DATE: 2003-01-06
PRIOR APPLICATION NUMBER: US 60/452,707
PRIOR FILING DATE: 2003-03-07
PRIOR APPLICATION NUMBER: US 60/482,081
PRIOR APPLICATION NUMBER: US 60/523,880
                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 15820
LENGTH: 137
                                                                                                                                                                                  Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Custom
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: A-72175-1
                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
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                                                                                                                                                                             Local Similarity 30.0 nes 30; Conservative
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                                       GDTIDLIENSEHQVLKNNTYW------
                                                                                      LSIDQVG---VHRSIAANMTFAEIVTPF----NIDRLQELVRRGNSQYPGAKYIIRDN 97
                                                                                                                                LEILQNGLYLIYGQVAPNANYND-VAPFEVRLYKNKDMIQTLTNKSKIQNVGGTYELH-V 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILL 119
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GDRIDIRFHPKHSDLHLQTGYKVKRHMCDGDIVIFNRQCI 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILL 113
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                                                                                                                                                                                                  10.4%;
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Pred. No. 0.25;
3; Mismatches
                                          GIILLANPQFI 125
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US-10-948-576-145; Sequence 145, A
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CURRENT FILING DATE: 2004-09-28
NUMBER OF SEQ ID NOS: 207
SOFTWARE: Patentin version 3.2
SEQ ID NO 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 181, Applic GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: METHODS OF DIAGNOSIS OF BLADDER CANCER, COMPOSITIONS TITLE OF INVENTION: OF SCREENING FOR MODULATORS OF BLADDER CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Mack, David APPLICANT: Aziz, Nata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: file
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       quence 145, Application US/10948576 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                    MEDIUM TYPE: CD
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                ZIP: 75201
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Carol M
                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Methods Of Ex-Vivo Using Multivariant
                   PRIOR
                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117 -- ILLANPQFIS 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    138 LEFLQADNNFIT 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59 VAPFEVRLYKNKDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGI-- 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48 CEAKGIKMVSEISVPPSRP-----FQLSLLNNGLTMLHTNDFSGLTNAISIHLGFNN 99
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               FILING DATE: 22-Sep-2004 CLASSIFICATION: <Unknown> APPLICATION DATA:
                                                                                                                                                                                                                    STATE: Texas
COUNTRY: USA
                                                   APPLICATION NUMBER: US/10/948,576 FILING DATE: 22-Sep-2004
                                                                                                                                                                                                                                                          CITY: Dallas
                                                                                                                                                                                                                                                                           STREET: P.O. Box 50784
APPLICATION NUMBER: 10/083,446
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ilarity 18.2%;
Conservative 3
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Klein, Barbara K.
                                                                                                                                                                                                                                                                                                                                                                                                    Olins, Peter
Paik, Kumnan
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Caparon, Maire H.
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                                                                                                                                                                                                                                                                                                                                                                                     Thomas, John W.
                                                                                                                                                                                                                                                                                                                                                                                                                                          McKearn, John P.
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                                                                                                                                                                                                                                                                                                                                                                                                                         Peter O.
                                                                                                                                                                                                                                                                                             M. Nielsen,
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Pred. No. 5.2;
31; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sarah
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Best Local (
                          PRIOR FILING DATE: 2002-04-12
PRIOR APPLICATION NUMBER: 60/049911
PRIOR PILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR PILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/05913
PRIOR APPLICATION NUMBER: 60/05913
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APPLICANT:
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                                                                                                                                      CURRENT FILING DATE: 2004-09-29
PRIOR APPLICATION NUMBER: US/10/121,058
                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/955,952
CURRENT FILING DATE: 2004-09-29
                                                                                                                                                                                                            TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME
                                                                                                                                                                                               FILE REFERENCE: P3330R1C12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION: NAME: Carol M. Nielsen
                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 145:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: 713-650-2722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        123 GGGSGGSNMAPVPPGE----DSKDVAAPHRQPLTSSERI 158
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 08/446,872 FILING DATE: 06-JUN-1995
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APPLICATION NUMBER: 08/762,227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/10955952
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                                                                                                                                                                                                                                                                   Watanabe, Colin K
Wood, William
                                                                                                                                                                                                                                                      Zhang, Zemin
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Gurney, Austin L.
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                                                                                                                                                                                                                                                                                                                        Stewart, Timothy A
                                                                                                                                                                                                                                                                                                                                                            Sherwood, Steven
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NUMBER: 60/059115
                 1997-09-17
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Pred. No. 1.
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                                                                                                                                                    APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRA
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: 93330R1C426
CURRENT APPLICATION NUMBER: US/10/157,779
CURRENT FILING DATE: 2002-05-29
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
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APPLICANT:
                                      PRIOR FILING DATE: 1997-08-26
PRIOR APPLICATION NUMBER: 60/059113
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059115
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059117
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NUMBER OF SEQ ID NOS: 550
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PRIOR APPLICATION NUMBER: 60/059352
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PRIOR APPLICATION NUMBER: 60/059184
PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
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PRIOR APPLICATION NUMBER: 60/059122
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FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059122
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INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
INVENTION: ACIDS ENCODING THE SAME
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                                                                                                                                                                                                                                                                                                                                                                                          Tumas,Daniel
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22.2%; Pred. No.
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; LENGTH: 285
; TYPE: PRT
; ORGANISM: Homo S
US-10-157-779-24
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Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 550
SEQ ID NO 24
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Best Local
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APPLICANT:
                                                                                                                                                       PRIOR APPLICATION NUMBER: PRIORT APPLICATION NUMBER: US/10/123,236
PRIOR FILING DATE: 2002-04-15
PRIOR APPLICATION NUMBER: 60/049911
PRIOR FILING DATE: 1997-06-18
PRIOR APPLICATION NUMBER: 60/056974
PRIOR FILING DATE: 1997-08-26
                                                                                                                                                                                                                                                                           TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3330R1C33
CURRENT APPLICATION NUMBER: US/10/964,241
CURRENT FILING DATE: 2004-10-12
CURRENT FILING DATE: 2004-10-12
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APPLICATION NUMBER: 60/059263
FILING DATE: 1997-09-18
APPLICATION NUMBER: 60/059352
FILING DATE: 1997-09-19
                                                                           APPLICATION NUMBER: 60/059113
FILING DATE: 1997-09-17
APPLICATION NUMBER: 60/059115
FILING DATE: 1997-09-17
                                     APPLICATION NUMBER: 60/059117 FILING DATE: 1997-09-17
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FILING DATE:
                  APPLICATION NUMBER: 60/059122
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                                                                                                                                                                                                                                                                                                                                                                                Zhang, Zemin
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Godowski, Paul J.
Gurney, Austin L.
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Filvaroff, Ellen
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APPLICANT: CHUNTHARAPAI, ANAN
APPLICANT: GREWAL, IQBAL
APPLICANT: GREWAL, IQBAL
APPLICANT: YAN, KYUNG JIN
APPLICANT: YAN, MINHONG
TITLE OF INVENTION: TACI Antibodies and Uses Thereof
FILE REFERENCE: P1942R1
CURRENT APPLICATION NUMBER: US/10/626,914
CURRENT FILING DATE: 2003-07-25
PRIOR APPLICATION NUMBER: US 60/398,530
PRIOR FILING DATE: 2002-07-25
NUMBER OF SEQ ID NOS: 17
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US-10-626-914-9
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US-10-964-241-24
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GENERAL INFORMATION:
Patin Docket Preview
                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 9
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Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 550
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PRIOR FILING DATE: 1997-09-17
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059352
                                                                                                                                                                                                                                                                                                                          TYPE: PRT ORGANISM: Homo sapien
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TYPE: PRT
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  SAGIAKLEEGDELQLAIPRENAQISLDGDVTFFGALKL
                                                                           GYFFIYGQVL----YIDKTYAMGHLIQRKKVHVFGDELSLVTLFRCIQNMPETLPNNSCY 246
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                                    -GGTYELHVGDTIDLIFNSEHQVLK---NNTYWGIILL 119
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US-10-076-157A-11

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US-10-668-178-15
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; ORGANISM: Ashbya gossypii
US-10-076-157A-11
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Best Local S
Matches 26
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Matches
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SOFTWARE: PatentIn version 3.3
SEQ ID NO 15
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GENERAL INFORMATION:
APPLICANT: KABUSHIKI KAISHA HAYASHIBARA SEIBUTSU KAGAKU KENKYUJO
APPLICANT: MAYUMI, Tadanori
APPLICANT: TSUTSUMI, Yasuo
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CURRENT APPLICATION NUMBER: US/10/668,178
CURRENT FILING DATE: 2003-09-24
CURRENT FILING DATE: J093509/2002
PRIOR APPLICATION NUMBER: JP 83509/2002
PRIOR APPLICATION NUMBER: JP 185387/2002
PRIOR APPLICATION NUMBER: JP 185387/2002
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APPLICANT: NAKAGAWA, Shinsaku
APPLICANT: IKEGAMI, Hakuo
TITLE OF INVENTION: Biologically-active conjugate
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CURRENT FILING DATE: 2002-02-15
PRIOR APPLICATION NUMBER: Germany, 19757755.5
PRIOR FILING DATE: 1997-12-23
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TITLE OF INVENTION: Phosphoriboxyl-Pyrophosphate Synthetase Polypeptide
FILE REFERENCE: PF48687-2/DP
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SOFTWARE: WordPerfect 8
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ORGANISM: Artificial
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                    102 QRETPEGAEALPWYEPIYLGGVFQLETGDRLSAEINRPDYLDFAESGQV-----YFGIIA 156
                                                      81 KIQN------VGGTYELHVGDTID-----LIFNSEHQVLKNNTYWGIIL
                                                                                            42
                                                                                                                              30 KVSDWKLEILQNGLYLIYGQV-----APNANY---NDVAPFEVRLYKNKDMIQTLTNKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99 AG--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26 PCVNKVSD--WKLE--ILQNGLYLIYGQVAPNANYNDVAPFEVRL-----YKNKDMIQT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     76 LTNKSKIQNVG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29;
                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                          BLRDNQLVVPSEGLYLIYSQVLFSGQGCPSTHVLLTHTISRIAVSYQTRVNLLSAIASPC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCTQKISELGWKPKGVILSGGPYSVYAADAPHV---DRAVFELGVPILGICYGLQELAWI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Seulberger, Harald
Hoeffken, Hans Wolfgang
Doval, Jose Luis Revuelta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jimenez, Alberto
                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---AEVGRGEKREYGRATLHVEDSACPLFNN----VDSSTVW 135
                                                                                                                                                                                                                                                                                                                                                                                                                       2002-06-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9.98;
27.48;
                                                                                                                                                                                        9.5%;
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                                                                                                                                                                    21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 66.5; DB Pred. No. 4.1; L6; Mismatches
                                                                                                                                                                    Score 64; DB 6; Length 157; Pred. No. 1.6; 1; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                    36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29;
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                                                                                          101
                                                        118
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                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: synthetic (Variant protein of human tumor necrosis factor) US-10-668-178-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-668-178-16
                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-948-576-122
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LENGTH: 157
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                               Sequence 122, Applicat GENERAL INFORMATION: APPLICANT: Abra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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APPLICANT: MAYUMI, Tadanori
APPLICANT: TSUTSUMI, Yasuo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/668,178
CURRENT FILING DATE: 2003-09-24
PRIOR APPLICATION NUMBER: JP 83509/2002
PRIOR FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: JP 185387/2002
PRIOR FILING DATE: 2002-06-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: IKEGAMI, Hakuo
TITLE OF INVENTION: Biologically-active conjugate
FILE REFERENCE: MAYUMI2A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 16
SOFTWARE: PatentIn version 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Carol M. Nielsen, Winstead Sechrest & Minick P.C
                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                      TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    157 L 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119 L 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                102 QRETPEGAEALPWYEPIYLGGVFQLETGDRLSAEINRPDYLDFAESGQV--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             157 L
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 KIQN-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42 ELRDNQLVVPSEGLYLIYSQVLFSGQGCPSTHVLLTHTISRIAVSYQTRVNLLSAIASPC 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30 KVSDWKLEILQNGLYLIYGQV-----APNANY---NDVAPFEVRLYKNKDMIQTLTNKS 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9.5%;
Similarity 21.5%;
                STATE: Texas
COUNTRY: USA
                                                                        STREET: P.O. Box 50784
                                                      CITY: Dallas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MAYUMI, Tadanori
TSUTSUMI, Yasuo
NAKAGAWA, Shinsaku
ZIP: 75201
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                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10948576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                              INVENTION: Methods Of Ex-Vivo Expansion Of Hematopoietic Cells
Using Multivariant IL-3 Hematopoiesis Chimera Proteins
F SEQUENCES: 197
                                                                                                                                                                                                      Caparon, Maire H.
Baston, Alan M.
Klein, Basbara K.
McKearn, John P.
Olins, Peter O.
Paik, Kumman
                                                                                                                                                                                                                                                                                                     Braford-Goldberg,
Maire H.
                                                                                                                                                                                                                                                                                                                                                             Abrams, Mark A.
                                                                                                                                                                                  Thomas, John W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    --VGGTYELHVGDTID-----LIFNSEHQVLKNNTYWGIIL 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 64; DB 6;
Pred. No. 1.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                           Sarah
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Length 157

36;

Gaps

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-YFGIIA 156

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TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 122:
US-10-948-576-122
                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
US-10-948-576-123
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GENERAL INFORMATION:
APPLICANT: Abrams, Mark A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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                                                                                                                                           Olins, Peter O.
Paik, Kumnan
Thomas, John W.
TITLE OF INVENTION: Methods Of Ex-Vivo
Using Multivariant
NUMBER OF SEQUENCES: 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Carol M. Nielsen
REGISTRATION NUMBER: 37,676
REFERENCE/DOCKET NUMBER: 279
TELECOMMUNICATION INFORMATION:
TELEPHONE: 713-650-2722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/446,872 FILING DATE: 06-JUN-1995 ATTORNEY/AGENT INFORMATION:
COMPUTER READABLE FORM:
                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Carol M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: PC-DOS/MG-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA
APPLICATION NUMBER: US/10/948,576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         53 NANYNDVAPFEVRLYKNKDMIQTLTNKS-----KIONVG------GTYBL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 EPCMAKEGPLPSKWQMASSEPPCVNKVSDWK-----LEILQNGLYLIYGQVAP 52
                CITY: Dallas
STATE: Texas
COUNTRY: USA
ZIP: 75201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGSGGGSNMATPLGPASSLPQSFLLKSLEQVRKIQGDGAALQEKLCATYKL 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QPC-----LPSA-TAAPSRHPIIIKAGDWQEEREKLTFYLVTLEQAQEQQYVIEGRISP 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 307 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 10/083,446
FILING DATE: 22-EB-2002
APPLICATION NUMBER: 08/62,227
FILING DATE: 09-DEC-1996
APPLICATION NUMBER: US 08/192,325
PILING DATE: 14-EB-1994
                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                Abrams, Mark A.
Bauer, S. C.
Braford-Goldberg, Sarah R.
Caparon, Maire H.
Easton, Alan M.
Klein, Barbara K.
                                                                                                                                                                                                                                    McKearn, John P. Olins, Peter O.
                                                                                          P.O.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9.5%;
                                                                                        arol M. Nielsen,
Box 50784
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 64; DB 6; Pred. No. 3.9;
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                                                                                                         Winstead Sechrest & Minick P.C
                                                                                                                                                            Expansion Of Hematopoietic IL-3 Hematopoiesis Chimera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 307;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                              Proteins
                                                                                                                                                                                 Cells
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RESULT 15
US-10-948-576-135
; Sequence 135, Applicat
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/762,227
FILING DATE: 09-DEC-1996
APPLICATION NUMBER: US 08/192,325
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: US 08/446,872
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Carol M. Nielsen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match 9.5%; Score 64; DB 6; Length 307; Local Similarity 25.9%; Pred. No. 3.9; les 29; Conservative 11; Mismatches 40; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 123:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHCE #1.0, Version #1.25
CURRENT APPLICATION DATA:
COUNTRY: USA
ZIP: 75201
COMPUTER READABLE FORM:
MEDIUM TYPE: CD
                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Carol M. Nielsen,
STREET: P.O. Box 50784
                                                                                                                                                                                                                        TITLE OF INVENTION: Methods Of Ex-Vivo Expansion Of Hematopoietic Cells
Using Multivariant IL-3 Hematopoiesis Chimera Prote:
NUMBER OF SEQUENCES: 197
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APPLICATION NUMBER: 10/083,446
FILING DATE: 22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 713-650-2722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Abrams, Mark A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  123 GGGSGGGSNMATPLGPASSLPQSFLLKSLEQVRKIQGDGAALQEKLCATYKL 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               53 NANYNDVAPFEVRLYKNKDMIQTLTNKS-----KIQNVG------GTYEL 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               70 QPC-----LPSA-TAAPSRHPIIIKAGDWQEFREKLTFYLVTLEQAQEQQYVIEGKISP 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5 EPCMAKFGPLPSKWQMASSEPPCVNKVSDWK------
                                                                                               CITY: Dallas
STATE: Texas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 307 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 37,676
REFERENCE/DOCKET NUMBER: 27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/10/948,576 FILING DATE: 22-Sep-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 214-745-5390
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Daik, Kumnan
Tohn
                                                                                                                                                                                                                                                                                                                                         McKearn, John P.
Olins, Peter O.
                                                                                                                                                                                                                                                                                                                                                                                        Easton, Alan M.
Klein, Barbara K.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Braford-Goldberg,
Caparon, Maire H.
                                                                                                                                                                                                                                                                                                Thomas, John W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bauer,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sarah R.
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                                                                                                                                                                        Winstead Sechrest & Minick P.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -LEILQNGLYLIYGQVAP 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            32;
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Proteins

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Search completed: November Job time: 13 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 09/62,227
APPLICATION NUMBER: 08/762,227
FILING DATE: 22-FEB-2002
APPLICATION NUMBER: 08/762,227
FILING DATE: 09-DEC-1996
APPLICATION NUMBER: US 08/192,325
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: US 08/446,872
FILING DATE: 16-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: CAROL NUMBER: 37,676
REGISTRATION NUMBER: 37,676
REFERENCE/DOCKET NUMBER: 2790/7 US
TELECOMMUNICATION INFORMATION:
TELECHONE: 713-650-2722
TELEFAX: 214-745-5390
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 307 amino acids
TYPE: amino acid
STRANDEDNESS: cUnknown>
TORDICGY: 110-647
                                                                                                                                                                                                                                                                                                                Query Match 9.5%; Score 64; DB 6; Length 307; Best Local Similarity 25.9%; Pred. No. 3.9; Matches 29; Conservative 11; Mismatches 40; Indels 32; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/10/948,576
FILING DATE: 22-Sep-2004
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
                                                                                                         123 GGGSGGGSNMATPLGPASSLPQSFLLKSLEQVRKIQGDGAALQEKLCATYKL 174
                                                                                                                                                                                                             70 QPC-----LPSA-TAAPSRHPIIIKAGDWQEFREKLTFYLVTLEQAQEQQYVIEGRISP
                                                                                                                                                        53 NANYNDVAPFEVRLYKNKDMIQTLTNKS-----KIQNVG------GTYEL 91
                                                                                                                                                                                                                                                                 5 EPCMAKEGPLPSKWQMASSEPPCVNKVSDWK------LEILQNGLYLIYGQVAP 52
                        2, 2004, 13:08:18
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Post-processing: Minimum Match
Maximum Match
Listing first
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Maximum DB
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Perfect score:
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                                                     Database
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seq
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length: 2000000000
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PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	scription
1	77	11.4	851	2	T51545	protein
N	75.5		314	N	081	
ω	75.5		3890	N	\sim	othetical prot
4	J		575	N	T28230	ORF MSV069 probabl
5	74		233	N	S11688	tumor necrosis fac
6	74		543	N	on	CD40 receptor-asso
7	74		567	N	4927	CD40 receptor-asso
00	74		568	N	A55960	
9	73.5	10.9	504	N	T47446	_
10	7	•	393	N	D75207	tica
11	72	10.7	477	N	S32223	penicillin-binding
12	72	10.7	486	N	F35965	lin-
13	72	10.7	525	N	E70125	prot
14	72	10.7	609	ш	A43458	prote
15	71.5	10.6	1123	N	A72311	hypothe
16	71.5	10.6	3623	N	T08618	റ
17	71	10.5	232	بر	S12606	necro
18	71	10.5	473	N	S39404	-
19	71	•	486	N	D35965	111
20	71		486	N	E35965	111
21	71		486	N	9	cillin-
22	71	•	486	N	C35965	cillin-
23	71	10.5	679	N	806000	cillin-
24	71	•	680	N	G95194	cillin-bindin
25	71	10.5	685	N	D98061	μ.
26	70.5	10.4	297	N	T28188	
27	70.5	10.4	890	N	A30481	bacteriocin BCN5 -
28	70.5	10.4	1508	N	T31098	probable dextransu
29	70	10.4	1010	N	T33372	hypothetical prote

A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Residues: 1-314 <BET>

UNIPROT:Q31417; EMBL:U08034; NID:g549857; PIDN:AAA52346.1;

PID:9560

A; Cross-references:

Genetics:

C;Accession: I50811
R;Betz, U.A.K.; Mayer, W.E.; Klein, J.
R;Betz, U.A.K.; Mayer, W.E.; Klein, J.
Proc. Natl. Acad. Sci. U.S.A. 91, 11065-11069, 1994
A;Title: Major histocompatibility complex class I genes
A;Reference number: I50810; MUID:95062206; PMID:7972010
A;Accession: I50811

of the

coelacanth Latimeria cha

4.5	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	
68	68	68	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	69.5	69.5	69.5	69.5	69.5	
10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.3	10.3	10.3	10.3	10.3	
345	345	234	1017	704	686	326	326	290	187	129	1236	997	989	351	234	
N	N	Н	2	N	N	L.	Н	2	N	N	N	N	N	N	μ	
E71858	B64565	JQ1344	PC4035	T29996	T20898	VGXR3S	VGXR2S	S59322	B72666	B35216	B36329	B71617	A54505	S67649	A25451	
hypothetical prote	conserved hypothet	tumor necrosis fac	cell-cycle-depende	hypothetical prote		-	glycoprotein VP7 p	•		FP14 protein - Iow		•	serine-repear and		tumor necrosis fac	

ALIGNMENTS

receptor protein kinase-like protein - Arabidopsis thaliana N;Alternate names: protein F2K13_50 C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 18-Aug_2000 #sequence_revision 18-Aug-2000 #text_change 16-Aug-2004

s: Mev

C; Accession:

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R;Sato, S.; Nakamura, Y.; Kaneko, T.; Kato, T.; Asamizu, E.; Kotani, H.; Tabata, submitted to the Protein Sequence Database, August 2000
MHC class I protein, alpha 1, alpha 2, alpha 3 and transmembrane domains - C;Species: Latimeria chalumnae (coelacanth)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
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A; Introns: 23/1;
A; Note: F2K13_50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Experimental source: cultivar Columbia; BAC clone F2K13
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A;Cross-references: UNIPROT:Q9LFL1; EMBL:AL391141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: T51545
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Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;Genetics:
                                                                                                                                                        140 VEEITHIPSSNSLQICLVKTGNSLPFISALELRLLRNDTY 179
                                                                                                                                                                                                                                           88 YTLDVLQNRYMIKAVFVYGNY---DGYNDYPSFDLYLGPNKWVRVDLEGK---
                                                                                                                                                                                                                                                                                   34 WKLEILONGLYLI-----YGQVAFNANYNDVAFFEVRLYKNKDMIQTLTNKSKIQNVGGT 88
                                                                                                                                                                                                  89
                                                                                                                                                                                                                                                                                                                                28;
                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                             11.4%; Score 77; DB 28.0%; Pred. No. 19; tive 17; Mismatches
                                                                                                                                                                                                       -GDTIDLIFNSEHQVLKNNTY 113
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                                                                                                                                                                                                                                                                                                                                      Indels
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                                                                                                                                                                                                                                                   -VNGS
                                                                                                                                                                                                                                                   139
                                                       coelacanth
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C;Date: 21-Jan-2000 #sequence_revision 21-Jan-2000 #text_char (;Accession: T28230 R;Afonso, C.L.; Tulman, E.R.; Lu, Z.; Oma, E.; Kutish, G.F.; J. Virol. 73, 533-552, 1999
A;Title: The genome of Melanoplus sanguinipes entomopoxvirus. A;Reference number: Z20484; MUID:99102612; PMID:9847359
                                                        A;Note: MSVU69
C;Superfamily: variola virus N3L protein
                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-575 < AFO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Residues: 1-3890 < KUR>
A; Cross-references: UNIPROT: Q99U53;
A; Experimental source: strain N315
C; Genetics:
                                                                                                                               A;Cross-references: UNIPROT:Q9YW23; EMBL:AF063866; NID:g4049647; PIDN:AAC97814.1;
                                                                                                                                                                        A;Status: preliminary; translated A;Molecule type: DNA
                                                                                                                                                                                                               A; Accession: T28230
                                                                                                                                                                                                                                                                                                                                                          ORF MSV069 probable rifampicin resistance (RIF) protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;Kuroda, M.; Ohta, T.; Uchiyama, I.; Baba, T.; Yuzawa, H.; Kobayashi, I.; Cui, L.; ma, A.; Mizutani-Ui, Y.; Kobayashi, N.; Sawano, T.; Inoue, R.; Kaito, C.; Sekimizu, C.; Shiba, T.; Hattori, M.; Ogasawara, N.; Hayashi, H.; Hiramatsu, K. Lancet 357, 1225-1240, 2001

A;Title: Whole genome sequencing of meticillin-resistant Stapylococcus aureus.

A;Reference number: A89758; MUID:21311952; PMID:11418146
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Gene:
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A;Residues: 1-3890 <1
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C;Superfamily: class I histocompatibility antigen; immunoglobulin homology
     Query Match
Best Local S
Matches 32
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     32;
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31; Conserv
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                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILLANPQFIS
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     Conservative
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                     23.7%;
                                         11.1%;
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     21;
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Pred. No. 1.8e-
17; Mismatches
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                   Score 75; DB
Pred. No. 19;
                                                                                                                                                                                                                                                                                                               entomopoxvirus
ision 21-Jan-2000 #text_change 09-Jul-2004
                                                                                                                                                                                         from GB/EMBL/DDBJ
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Pred. No. 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GB:BA000018; PID:g13701233; PIDN:BAB42528.1;
     Mismatches
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No. 1.8e+02;
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                                       2;
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                                   Length 575;
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 Indels
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 26;
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 Gaps
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A;Reference number: I53498; MUID:95129692;
   A; Gene: CAP-1
C; Superfamily:
C; Keywords: hor
                                                                                                                                               A;Reference number: I53498; MUID:95:
A;Rocession: S68467
A;Status: nucleic acid sequence not
                                                                                                                                                                                                                                                              C;Species: Homo sapiens (man)
C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998
C;Accession: S68467; 153498
                                                                      A;Cross-references: UNIPROT:Q13114; EMBL:L38509; NID:g695357; PIDN:AAA68195.1; PID:g69535A;Experimental source: tissue-type fetal brain
                                                                                                                A; Molecule type: mRNA
A; Residues: 1-543 < SAT>
                                                                                                                                                                                                                                                                                                                   S68467
CD40 receptor-associated protein CAP-1 - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Introns: 62/3; 78/1; 94/1
G;Superfamily: tumor necrosis factor
C;Superfamily: tumor necrosis factor
C;Keywords: glycoprotein; lipoprotein; myristylation; transmembrane
F;19,20/Binding site: myristate (Lys) (covalent) #status predicted
F;81/Binding site: carbohydrate (Ser) (covalent) #status predicted
F;145-177/Disulfide bonds: #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tumor necrosis factor alpha precursor - cat
C;Species: Felis silvestris catus (domestic cat)
C;Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #text_change
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S11688
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A; Residues: 1-233 < MCG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Reference number: A; Accession: S11688
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A;Title: Gene seguence of feline tumor necrosis factor alpha
A;Reference number: S11688; MUID:91016860; PMID:2216740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R;McGraw, R.A.; Coffee,
Nucleic Acids Res. 18, 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: preliminary
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   homodimer;
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TNF receptor-associated factor (TRAF); R modimer; signal transduction; zinc finger
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B.W.; Otto, C.M.; Drews, R.T.; Rawlings, 5563, 1990
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Pred. No. 7.8;
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                 RING
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RESULT 7
149272
CD40 receptor-associated factor 1
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NyAlternate names: CD40-binding protein
C;Species: Homo sapiens (man)
C;Date: 15-Mar-1996 #sequence revision 15-Mar-1996 #text_change 09-Jul-2004
C;Accession: A55960; A55649; Ā55135
R;Cheng, G.; Cleary, A.M.; Ye, Z.S.; Hong, D.I.; Lederman, S.; Baltimore, D. Science 267, 1494-1498, 1995
A;Title: Involvement of CRAF1, a relative of TRAF, in CD40 signaling.
A;Reference number: A55960; MUID:95184010; PMID:7533327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Cheng, G.; Cleary, A.M.; Ye, Z.S.; Hong, D.I.; Lederman, S.; Baltin Science 267, 1494-1498, 1995
A;Title: Involvement of CRAF1, a relative of TRAF, in CD40 signaling A;Reference number: A55960; MUID:95184010; PMID:7533327
A;Accession: I49272
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                                                                       A;Cross references: UNIPROT:Q13114; EMBL:U21092; NID:g726(
R;Mostalos, G.; Birkenbach, M.; Yalamanchili, R.; VanArsdd
Cell 80, 389-399, 1995
A;Title: The Epstein-Barr virus transforming protein LMP1
A;Reference number: A55649; MUID:95163092; PMID:7859281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Gene: CRAF1
C; Superfamily: TNF re
C; Keywords: zinc fing
F; 48-96/Domain: RING
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A;Status: nucleic acid sequenc
A;Molecule type: mRNA
A;Residues: 1-128,'M',130-568
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                                                         A; Accession: A55649
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                                                                                                                                                                                             A; Molecule type: mRNA
                                                                                                                                                                                                                  A;Status: preliminary
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Best Local S
Matches 28
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Cross-references: UNIPROT:Q60803; EMBL:U21050; NID:g719292; PIDN:AAC52175.1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMLR - - NNESKI - - -
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                                      acid sequence not
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28.3%;
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Pred. No.
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Mismatches
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23;
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                                                                                                                                    NID:g726087; PIDN:AAC50112.1; PID; VanArsdale, T.; Ware, C.; Kieff,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24;
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                                                                                                                                        PID:97260
eff, E.
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A; Reference number: A75001 A; Accession: D75207

submitted to the EMBL Data Library, July A;Description: Pyrococcus abyssi genome :

1999 sequence:

insights

into

archaeal chromosome

sti

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C;Keywords: coiled coil; zinc F;49-97/Domain: RING finc.
                                                                                                                                                                                                                                                                                                                                                                                                        A; Status, p. ...
A; Molecule type: DNA
A; Residues: 1-504 < JOR>
A; Cross-references: UNIPROT:Q9M1N3; EMBL:AL138652
A; Cross-references: cultivar Columbia; BAC clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Hu, H.M.; O'Rourke, K.; Boguski, M.S.; Dixit, V.M. J. Biol. Chem. 269, 30069-30072, 1994
A;Title: A novel RING finger protein interacts with the A;Reference number: A55135; MUID:95073988; PMID:7527023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: mRNA
A;Residues: 1-128,'M',130-133,135-404,'G',406-568 <HUA>
A;Cross-references: GB:U15637; NID:g595910; PIDN:AAA56753.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: GB:U19260; NID:g675459; PIDN:AAA65732.1; PID:g675460 R;Hu, H.M.; O'Rourke, K.; Boguski, M.S.; Dixit, V.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: A; Accession: T47446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hypothetical protein T18B22.110 - Arabidopsis thaliana (;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 20-Apr-2000 #sequence_revision 20-Apr-2000 #text_change 09-Jul-2004 C;Accession: T47446
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              hypothetical protein PAB2235 - Pyrococcus abyssi (strain Orsay) C;Species: Pyrococcus abyssi (c;Species: Pyrococcus abyssi C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change C;Accession: D75207
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A; Note: T18B22.110
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R; anonymous, Genoscope
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                                                                                                     RESULT 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ASSAVQHVNLLKEWSNSLEKKVSLLQN--
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                                                                                                                                                                                              GDTIDLIFNSEHQVLKNNTYW 114
                                                                                                                                                                                                                                  WILPAIRNDLILLENQV-----
                                                                                                                                                                                                                                                                   WKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHV
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28.3%;
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28.4%;
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Pred. No. 22;
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Pred. No. 23;
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                                 #text_change
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A;Cross-references: UNIPROT:Q54503;
A:Fxmerimental source: strains 5296
                                                                                                                                                                                                                                                    RESULT 12
F35965
                                                    A;Status: preliminary; not compared with conceptual translation A;Molecule type: DNA
                                                                                                      R;Dowson, C.G.; Hutchison, A.; Woodford, N.; Johnson, A.I
Proc. Natl. Acad. Sci. U.S.A. 87, 5888-5862, 1990
A;Title: Penicillin-resistant viridans streptococci have
A;Reference number: A35965; MUID:90332682; PMID:2377622
                                        A;Residues:
                                                                                                                                                                           penicillin-binding protein 2B - Streptococcus oralis (fragment)
C;Species: Streptococcus oralis
C;Date: 09-Nov-1990 #sequence_revision 09-Nov-1990 #text_change 09-Jul-2004
C;Accession: F35965
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C;Superfamily: penicillin-binding protein 2B
C;Keywords: antibiotic resistance; penicilli
                                                                                         A; Accession: F35965
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-477 < COF>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Reference number: S32223
A;Accession: S32223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                submitted to the EMBL Data Library, March 1993
A;Description: Horizontal spread of an altered penicillin-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Coffey,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Accession: S32223
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: DNA
A;Residues: 1-393 <KAW>
A;Cross-references: UNIPROT:Q9V291; GB:AJ248283; GB:AL096836; NID:g5457433; PIDN:CAB491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Variety: strain 52328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          penicillin-binding protein 2B - Streptococcus pneumoniae (strain 52328) (fragment)
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C;Superfamily: Pyrococcus horikoshii hypothetical
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10.7%;
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                                                                                                                                                       Woodford, N.; Johnson, A.P.; George, R.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16;
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Pred. No.
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 and
                  GB:M32226;
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A;Reference number: A43458; MUID:92407024; PMID:1527163 A;Accession: A43458
                                                                                                  replication protein A1 - African clawed frog
W;Alternate names: replication protein A 70K chain
C;Species: Xenopus laevis (African clawed frog)
C;Date: 10-Jun-1993 #sequence_revision 27-Oct-1995 #text_change 09-Jul-2004
C;Accession: A43458; S24638
R;Adachi, Y.; Laemmli, U.K.
J. Cell Biol. 119, 1-15, 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nature 390, 580-586, 1997
A; Authors: Smith, H.O.; Venter, J.C.
A; Title: Genomic sequence of a Lyme disease spirochaete,
A; Title: A; Title: MUID: 98065943; PMID: 9403685
   A;Residues: 1-609 </
                                                                                                                                                                                                                                A43458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Superfamily: Borrelia burgdorferi hypothetical protein BB0205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothetical protein BB0205 - Lyme disease spiroche C;Species: Borrelia burgdorferi (Lyme disease spiro C;Date: 13-Feb-1998 #sequence_revision 13-Feb-1998 C;Accession: E70125
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E70125
                                  A; Molecule type: mRNA; protein
                                                                                                                                                                                                                                                RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Reference number: A70100; MUID:98065943; A;Accession: E70125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R; Fraser,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: UNIPROT:O51223; GB:AE001131; GB:AE000783; NID:g2688098; PIDN:AAC66601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Residues:
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 UNIPROT: Q01588;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10.7%;
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Pred.
EMBL:X67240; NID:g65065;
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PIDN:CAA47665.1;
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C;Superfamily: Pyrococcus abyssi hypothetical protein PAB0589
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A;Cross-references: UNIPROT:Q9X083; GB:AE001760; GB:AE000512; NID:g4981510; PIDN:AAD3606
A;Experimental source: strain MSB8
                                                                                                                          γQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nature 399, 323-329, 1999
A;Title: Evidence for lateral gene transfer between Archaea and Bacteria from genome A;Reference number: A72200; MUID:99287316; PMID:10360571
A;Accession: A72311
A;Status: preliminary
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            conserved hypothetical protein - Thermotoga maritima (strain MSB8)
c;Species: Thermotoga maritima
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
C;Accession: A72311
R;Nelson, K.E.; Clayton, R.A.; Gill, S.R.; Gwinn, M.L.; Dodson, R.J.; Haft, D.H.; Hid Garrett, M.M.; Stewart, A.M.; Cotton, M.D.; Pratt, M.S.; Phillips, C.A.; Richardson, C.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Note: sequence extracted from NCBI backbone (NCBIN:113390, NCBIP:113391)
A,Note: parts of the sequence determined by protein sequencing
C;Complex: Replication protein A is a trimer of 70K (A1), 32K (A2), and 14K (A3) chains.
C;Function:
A;Description: thought to be the eukaryotic equivalent of prokaryotic single-stranded DN A synthesis
A;Pathway: DNA replication initiation
C;Superfamily: replication protein A1
C;Keywords: DNA replication initiation; single-stranded DNA binding; trimer; zinc finger
F;472-494/Region: zinc finger CCCC motif
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                                                                                       RGK---
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                                                                                                                                                                                                           WOMASSEPPCVNKVSDWKL-EILQNGLYLIYGQVAFNANYNDVAPFEVRLYKNKDMIQTL 76
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                                                                                                                                                                                                                                                                Conservative
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                                                                                   GSTVEEHVRFFEQVIVSKEPQELMDNEMYKLFVLVS 601
                                                                                                                                                                                                                                                         10.6%; Score 71.5; [
25.7%; Pred. No. 94;
tive 21; Mismatches
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                  2004, 12:59:28
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Perfect score:
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  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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seq length: 2000000000
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1 ETAKEPCMAKFGPLPSKWOM
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SUBCELLULAR LOCATION: Type II membrane protein (Potential).
TISSUE SPECIFICITY: Expressed at high levels in the small intestline, ovary, testis, kidney and endothelial cells.
INDUCTION: Up-regulated after stimulation by lipopolysaccharides.
SIMILARITY: Belongs to the tumor necrosis factor family.

SUBCELLULAR LOCATION: TISSUE SPECIFICITY: E:

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GO; GO:0006916; P:anti-apoptosis; TAS.
GO; GO:0007267; P:cell-cell signaling; TAS.
GO; GO:0007165; P:signal transduction; TAS.
InterPro; IPR006052; TNF family.
InterPro; IPR008093; TNF like.
PROSITE; PS00251; TNF 1; FALSE NEG.
PROSITE; PS0049; TNF 2; FALSE NEG.
Cytokine; Glycoprotein; Signal-anchor; Transmu
TISSUE=Synthetic constructs;
MEDLINE=22389257; PubMed=12477932;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.
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EMBL; AY358868; AAQ89227.1; -.
EMBL; AF17713; AAD19695.1; -.
Genew; HGNC:11932; TNFSF18.
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129
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                                                                                                                                                                                                                                                                                                             Primates;
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Extracellular (Potential).

N-linked (GlcNAc. .) (Potential)

N-linked (GlcNAc. .) (Potential)
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Signal-anchor for type II membrane
                                                                                                                                                                                                                                                                                                      Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 675; DB 1;
Pred. No. 1.1e-57;
                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Transmembrane.
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X MEDLINE=2238855; Pubmeda:12477932;

X Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

X Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

X Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

X Hopkins R.F., Jordan H., Moore T., Casavant T.L., Schaetz T.E.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hong L.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Scheetz T.E.,

X Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Scheetz T.E.,

X Hopkins R.F., Jordan H., Toshiyuki S., Carninci P., Prange C.,

X Hallon M., Ugdin T.B., Toshiyuki S., Carninci P., Prange C.,

X Richards S., Morley R.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

X Wilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

X Pahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

X Hilling M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
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Mammalia; Eutheria;
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01-JUN-2004 (TrEMBLrel.
01-JUN-2004 (TrEMBLrel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=PCR rescued clones;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Scheetz T.E., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A. C., Shevchenko Y., Bouffard G.G., Blakesley R.M., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalska U., Smailus D.B., Schnerch A., Schein J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH69319;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Generation and initial analysis and mouse cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
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Primates;
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Pred. No. 1.1e-57;
; Mismatches 0;
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Best Local S
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Query Match
Best Local Similarity
                                                      costimulatory for T cells.";

proc. Natl. Acad. Sci. U.S.A. 100:15059-15

EMBL; AV234223; AAO89011.1; -.

EMBL; AJ577579; CAE12166.1; -.

EMBL; AJ577580; CAE12167.1; -.

MGD; MG1:2673064; Thisfils

GO; GO:0016020; C:membrane; IEA.

GO; GO:00069164; P:tumor necrosis factor re

GO; GO:0006955; P:immune response; IEA.

GO; GO:0006955; P:immune response; IEA.

InterPro; IPR008983; TNF like.

InterPro; IPR003636; TNF subf.

ProDom, PD002012; TNF subf.

ProDom, PD002012; TNF subf.

ProDom, PD002012; TNF subf.

ProDom, PD002012; TNF subf.

ProDom, PD002012; TNF subf.

ProDom, PD002012; TNF subf.
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Rodriguez A.C., Grimwood J., Schm
Krzywinski M.I., Skalska U., Smai
Jones S.J., Marra M.A.;
"Generation and initial analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A.
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Mus musculus (Mouse).
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01-JUN-2003 (TrEMBLrel.
05-JUL-2004 (TrEMBLrel.
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01-JUN-2003
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                      PubMed=14608036;
                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=CBA/Ca;
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                                                                                                                                                                                                                                                                                                                                    Waldmann
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                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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BC069319; AAH69319.1; -.
NCE 177 AA; 20307 MW; 3D78CE6B90F4C9E3 CRC64;
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Sciurognathi; Muridae;
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    348; DB 2;
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Mammalia; Eutheria;
NCBI_TaxID=10090;
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                              GO; GO:0016020; C:membrane; IEA,
GO; GO:0005164; F:tumor necrosis f.
GO; GO:0006955; P:immune response;
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EMBL; AY267900; AAP96745.1; -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-0CT-2003
01-0CT-2003
                                                                                                                                                                                                                                                                                                                     InterPro; IPR003636; TNF subf; ProDom; PD002012; TNF subf; 1. seQUENCE 173 AA; 19773 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=BALB/c;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q7TNY2;
01-0CT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q7TNY2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tone M., Waldmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PubMed=14647196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Mouse glucocorticoid-induced tumor costimulatory for T cells.", Proc. Natl. Acad. Sci. U.S.A. 100:15 EMBL; AJ577580; CAE12167.1; -.
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167
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                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 72; Conserv
PDLPFIS
                                    ANPOFIS 126
                                                                                                        APFEVRLYKNKDMIQTLINKSKIQNVGGTYBLHVGDTIDLIFNSEHQVLKNNTYWGIILL
                                                                    APFVVQIYKKNDVLQTLMNDFQILPIGGVYELHAGDNIYLKFNSKDHIQKNNTYWGIILM
                                                                                                                                                TVIESCMVKFELSSSKWHMTSPKPHCVNTTSDGKLKILQSGTYLIYGQVIPVDKKYIKDN
                                                                                                                                                                                       TAKEPCMAKFGELPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAP-NANY-NDV 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PDLPFIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APFVVQIYKKNDVLQTLMNDFQILPIGGVYBLHAGDNIYLKFNSKDHIQKNNTYWGIILM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APFEVRLYKNKDMIQTLINKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAIESCMVKFELSSSKWHMTSPKPHCVNTTSDGKLKILQSGTYLIYGQVIPVDKKYIKDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLTYGQVAP-NANY-NDV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  e splicing.
173 AA; 19745 MW;
                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TremBLrel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Adams
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata;
                                                                                                                                                                                                                                                           55.9%;
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                                                                                                                                                                                                                                        14;
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                                                                                                                                                                                                                                                           Score
Pred.
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Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 348; DB
Pred. No. 7.5e
14; Mismatches
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Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                     1FD22953BCFC34C5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lee U.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1FD2294CACF424D2
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ies 40;
                                                                                                                                                                                                                                                                              DB 2;
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                                                                                                                                                                                                                                                                          Length 173;
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RESULT Q7TS55

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RESULT 9
AAGS526
ID AAGS
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AC AAGS
DT 02-M
DT 02-M
DT 02-M
CH Gluc
GN GITR
OS MUS
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Best Local
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                                                                                                                                                                     AAQ55265
AAQ55265;
02-MAR-2004
02-MAR-2004
02-MAR-2004
                                                             Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                               02-MAR-2004 (TrEMBLrel. 27, I
02-MAR-2004 (TrEMBLrel. 27, I
Glucocorticoid-induced-tumor
SEQUENCE FROM N.A
                                       NCBI_TaxID=10090;
                                                                                                       Mus musculus
                                                                                                                                  GITRL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yu K.-Y., Min S.S., Youn B. Submitted (AUG-2003) to the EMBL; AY320040; AAP70494.1; EMBL; AY359852; AAQ55265.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=C57/1
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05-JUL-2004
GITR ligand
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Q7TS55;
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WEDLINE=22883945; PubMed=14521928;
Yu K.Y., Kim H.S., Song S.Y., Min S.S., Jeong J.J., Youn B.S.;
"Identification of a ligand for glucocorticoid-induced tumor not
factor receptor constitutively expressed in dendritic cells.";
Biochem. Biophys. Res. Commun. 310:433-438(2003).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProDom;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=129/J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=129/J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GO:0005164; F:tumor necrosis fi
GO:0006955; P:immune response;
erPro; IPR003636; TNF_subf.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GO:0016020; C:membrane; IEA.
GO:0004872; F:receptor activity;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PD002012;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APFEVRLYKOKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILL
                                                                                                                                                                                                                                                                                                                                                                PDLPFIS
                                                                                                                                                                                                                                                                                                                                                                                                      ANPOFIS
                                                                                                                                                                                                                                                                                                                                                                                                                                         APFVVQIYKKNDVLQTLMNDFQILPIGGVYELHAGDNIYLKFNSKDHIQKTNTYWGIILM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAIBSCMVKFELSSSKWHWTSPKPHCVNTTSDGKLKILQSGTYLIYGQVIPVDKKYIKDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAKEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAP-NANY-NDV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (JUN-2003) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                               (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                         (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TrEMBLrel. 25, Created)
(TrEMBLrel. 25, Last sequence update)
(TrEMBLrel. 27, Last annotation update)
(Glucoccorticoid-induced-tumor necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA;
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                                                                                                                                                                                                                                                                                                                                                                173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TNF_subf; 1.
                                                             Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19732 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50.7%;
55.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14;
                                                                                                                                                                   Last sequence update)
Last annotation update
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 342; DB 2;
Pred. No. 2.9e-25;
L4; Mismatches 40
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Sciurognathi;
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MEDLINE=22883945; PubMed=14521928;
Yu K.Y., Kim H.S., Song S.Y., Min S.S., Jeong J.J., Youn B.S.;
Yu K.Y., Kim H.S., Song for glucocorticoid-induced tumor not a ligand for glucocorticoid-induced tumor not factor receptor constitutively expressed in dendritic cells.";
Biochem. Biophys. Res. Commun. 310:433-438(2003).
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SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SETRAIN=White leghorn; TISSUE=Spleen;

Tregaskes C.A., Young J.R., Burnside J.;

Tregaskes C.A., Young J.R., Burnside J.;

"Cloning of a putative chicken CD40 ligand.";

"Cloning o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yu K.-Y.,
Submitted
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05-JUL-2004 (Rel. 44, Last annotation update)
Tumor necrosis factor ligand superfamily member
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-FEB-2003 (Rel. 41,
29-MAR-2004 (Rel. 43,
05-JUL-2004 (Rel. 44,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TNF5_CHICK
Q918D8;
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                                                                      use by non-profit institute. There are no restrictions modified and this statement is not removed. Usage by and for comentities requires a license agreement (See http://www.nor.send.an.email to licenses.an.email to lice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Name=TNFSF5; Synonyms=CD40LG, Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      L) (CD154 protein).
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Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
    EMBL;
                                                                                                                                                                                                                                                            s SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the EN European Bioinformatics Institute. There are no rest
                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBCELLULAR LOCATION: Type II membrane protein. Also exitacellular soluble form (By similarity).

PTM: The soluble form derives from the membrane form by proteolytic processing (By similarity).

SIMILARITY: Belongs to the tumor necrosis factor family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          proliferation in the absence of co-stimulus as vertical production in the presence of IL-4. Involved in class switching (By similarity).
SUBUNIT: Homotrimer (By similarity).
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                                                                                                                                                 (See http://www.isb-sib.ch/announce/
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GO; GO:0016021; C:integral to membrane; ISS.
GO; GO:0005174; F:CD40 receptor binding; ISS.
GO; GO:0042100; P:B-cell proliferation; ISS.
GO; GO:0042100; P:B-cell proliferation; ISS.
GO; GO:0007159; P:leukocyte cell adhesion; ISS.
GO; GO:0030168; P:platelet activation; ISS.
InterPro; IPR003263; TNF_family.
InterPro; IPR003636; TNF_subf.
InterPro; IPR003636; TNF_subf.
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ProDom; PD008600; TNF 5; 1.
ProDom; PD002012; TNF subf; 1.
PROSITE; PS00251; TNF 1; 1.
PROSITE; PS50049; TNF 2; 1.
Cytokine; Glycoprotein; Signal-a
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                                                                                                                                           Dictyostelium discoideum (Slime mold)
Eukaryota; Mycetozoa; Dictyosteliida;
                                                                                                                                                                 Hypothetical protein.
                                                                                                                                                                                       01-JUN-2003
                                                                                                                                                                                                 Q86IB8;
01-JUN-2003
                               Gloeckner G., Eichinger L., Szafranski K
Lehmann R., Baumgart C., Parra G., April
Tunggal B., Cox E., Quail M.A., Platzer
"Sequence and analysis of chromosome 2 o
Nature 418:79-85(2002).
                                                                                                SEQUENCE FROM N.A. STRAIN=AX4;
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SEQUENCE FROM N.A
STRAIN=AX4;
                                                                 MEDLINE=22092622; PubMed=12097910;
Gloeckner G., Eichinger L., Szafra
Lehmann R., Baumgart C., Parra G.,
                                                                                                                                NCBI_TaxID=44689;
                                                                                                                                                                                                                                                                                                                                                                      153
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                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                          KWQWASSEPPCVNKVS--DWKLEILQNGLYLIYGQVAPNANYNDVAPFEVRLY------
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(TrEMBLrel.
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26,
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N-linked
N-linked
                                                                            Szafranski
                                                                                                                                                                                                    Created)
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Extracellular (Potential).
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                                                       nski K., Pachebat J., Dear P.
April J.F., Guigo R., Kumpf
atzer M., Rosenthal A., Noego
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5, membrane form
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H (GlcNAc...)
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                                              c M., Rosenthal A., Noegel A.A.;
of Dictyostelium discoideum.";
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RESULT 13
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AC Q8IAW
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Matches 27
                    Q8IAW5;
Q8IAW5;
01-MAR-2003
01-MAR-2003
01-MAR-2003
  Hypothetical
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Q896D6;
Q1-JUN-2003 (TrEMBLrel. 24, Created)
Q1-JUN-2003 (TrEMBLrel. 24, Last sequence update)
Q1-OCT-2003 (TrEMBLrel. 25, Last annotation update)
XilA protein, putative phage-related DNA binding protein.
Name=kilA; OrderedLocusNames=CTC01071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Complete proteome. SEQUENCE 270 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=22457253; PubMed=12552129; Brueggemann H., Baeumer S., Fricke W.F., Wiezer A., | Decker I., Herzberg C., Martinez-Arias R., Merkl R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "The genome sequence of Clostridium tetani, the causative tetanus disease.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clostridium tetani.
Bacteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gottschalk G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=Massachusetts / E88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clostridium.
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Submitted (FEB-2004) to the EMI
EMBL; AC116551; AAOS2204.1; -.
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                              134
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                                                                                                                                                                                                                                                                                                                                                                                              89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29 NKVSDWKLEILQNGLKLIYGQVAENANYNDVAFFEVRLYKNKDMIQTLINKSKIQNVGGT
                                                                                                                                                                                                                                             Ν̈́
                                                                                                                                                                                                                                                                                              A
                                                                                                                                                                                                                                                                                                                                 LNKLLHELKVQYKQNDQWLLYKEHSGKGYTHSETIDIVRSDGRPDVKVNYKWTQKGRLFL
                                                                                                                                                                                                                                                                                                                                                                                                                            KAKNKMLELQNKQKEQIIGELKPRADYTD-----RILKNKGLV-TITQIAKDYGMTGTG 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YELHVGDTIDLIFNSEHQVLKNNTYWGIILLAN 121
       (TrEMBLrel. 23, Created)
(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12.7%; Score 85.5; I ilarity 25.4%; Pred. No. 4.7; Conservative 18; Mismatches
                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             516 AA;
protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31533 MW;
  PF08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          58667 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29.0%;
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                                                                                                                                                                                                                                                                                                                                                                            YELHVG-----DTIDLIFNSEHQVLKNNTYW---GIILL 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 86.5;
Pred. No. 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C378AB524C0133A8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80B308CF6CDF97C2
                                                                                                                 599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.7;
                                                                                                                 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 270;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
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DR GO; GO.

DR GO; GO:00041

DR GO; GO:00041

DR GO; GO:00016787;

DR GO; GO:0003723; F:A.

DR GO; GO:0003968; F:RNA-

DR GO; GO:0003968; F:STUCCTU.

DR GO; GO:0005508; P:proteclysi.

DR GO; GO:000550; P:transcription,

GO; GO:0019079; P:viral genome rep.

InterPro; IPR00145; DEAD/DEAH N.

'terPro; IPR00145; DEAD/DEAH N.

'TerPro; IPR001456; Peptidase Cd.

'RN002540; Pept_S30 Foty_Cod.

'N_592; RNA_FOL_DS.

RNA_FOL_PS.

RNA_FOL_PS.

RNA_FOL_PSvir.
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chen J., Chen J.P., Adams M.J.;
"Characterisation of potyviruses from sugarcane and maize in China.";
"Characterisation of potyviruses from sugarcane and maize in China.";
"Arch. Virol. 147:137-1246 (2002).
"I-SIMILARITY: Belongs to the potyviruses polyprotein family."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AJ310105; CAC84095.1; -. HSSP; P04517; 1LVM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=22105130; PubMed=12111432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=12224;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Viruses; ssRNA positive-strand viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sugarcane mosaic virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polyprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q8QXN1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plasmodium falciparum (isolate 3D7).
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
NCBI_TaxID=36329;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hypothetical protein. SEQUENCE 599 AA; 7
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                                                                                                                                                                                                                                                                                                                            GO:0019028; C:viral capsid; IEA.
GO:0005524; F:ATP binding; IEA.
GO:0008526; F:ATP dependent helicase activity; IEA.
GO:0008026; F:ATP-dependent helicase activity; IEA.
GO:0004197; F:vysteine-type endopeptidase activity;
GO:0016787; F:hydrolase activity; IEA.
GO:0003723; F:RNA binding; IEA.
GO:0003723; F:RNA binding; IEA.
GO:000398; F:Structural molecule activity; IEA.
GO:0005198; F:structural molecule activity; IEA.
GO:0006508; P:proteolysis and peptidolysis; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P04517;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   527
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28 VNKVSDWKLBILQNGLYLIYGQVAPNANY--NDVAPFEVRLYKNKDMIQTL------
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                                                                                                                                                                                                                                                                                                               P:proteolysis and peptidolysis;
P:transcription; IEA.
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22.9%; Pre
rative 24;
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                                                                                                                                                                                                                                                                                        replication; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3063 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              no DNA stage; Potyviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -QNVGGTYELHVGDTIDLIFNSEHQVLK--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pain A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    109
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRINTS; PRO09
SMART; SMO049
SMART; SMO049
ATP-binding;
CHAIN 10
CHAIN 11
CHAIN 17
CHAIN 17
CHAIN 17
CHAIN 19
CHAIN 22
CHAIN 22
CHAIN 22
CHAIN 27
InterPro;
InterPro;
Pfam; PF00
                                                                                                                                  Brettin T.S., Bruce D., Challacombe J.F., Gilna P., Han C., Hitchcock P., Jackson P., Keim P., Longmire J., Lucas S., O Richardson P., Rubin B., Tice H.;
Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
-!- CATALYTIC ACTIVITY: Protein N(6)-(dihydrolipoyl)lysine protein N(6)-(lipoyl)lysine + NADH.
-!- COPACTOR: Binds 1 FAD per subunit (By similarity).
-!- COPACTOR: FAD (By similarity).
-!- MISCELLANEOUS: The active site is a redox-active disulf
                                                                                                                                                                                                                                                                                Bacillus thuringiensis serovar konkukian str. 5
Bacteria, Firmicutes, Bacillales, Bacillaceae,
Bacillus thuringiensis serovar konkukian
                                 InterPro;
InterPro;
InterPro;
                                                                                            EMBL;
                                                                                                                                                                                                                                                                                                                           05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
01-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Dihydrolipoamide dehydrogenase (EC 1.8.1.4)
Name=acoL; ORFNames=ET9727_2536;
                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                               NCBI_TaxID=281309;
                                                                                                                                                                                                                                                                                                                                                                                   Q6HHW4;
                                                                                                                                                                                                                                                                                                                                                                                                 Q6HHW4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam;
Pfam;
Pfam;
Pfam;
Pfam;
Pfam;
Pfam;
                                                                     InterPro;
                                                                                 InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
        oxidoreductase family.

MBL, AE017355; AAT61350.1; --
nterPro; IPR001327; FAD pyr redox.

nterPro; IPR000815; Hg reductase.

nterPro; IPR0006258; Lipoamide_dh.

nterPro; IPR000103; PyrTdine_redox_2.

nterPro; IPR0001100; Pyr_redox_dim.

nterPro; IPR001100; Pyr_redox_dim.
                                                                                                                                                                                                                                                                                                                                                                                                                       15
                                                                                                               SIMILARITY: Belongs to the class-I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           n; PF00270; DEAD; 1.

n; PF00271; Helicase C; 1.

n; PF00861; Peptidase C6; 1.

n; PF00861; Peptidase C6; 1.

n; PF00767; Poty Coat; 1.

n; PF0057; Poty GP1; 1.

n; PF00580; RNA GP RNA DO1; 1

n; PF00680; RNA GP RNA DO1; 1

TTS; PR00966; RNA GP RNA DO1; 1
                                                                                                                            (By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                          397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SM00487; DEXDc; 1.
SM00490; HELICC; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                     VSRWYKNRKESLKTDTLETFRNKVSPKS-----TINAALMCDNOLDKNANFVWG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           V-RLYKNK-----DMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKN-NTYWG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KERCNPKFSHLPLLWQVAETIGHYTDNQSKQILDI-SEALIKVNTLTPDDAVKASVALLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEPCMAKFGPLPSKWQMASSEPPCVNKVSDWKLEILQNGLYLIYGQVAPNANYNDVAPFE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                234
3063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2230
2751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1041
1108
1746
1799
1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Coat
Pyr_redox;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1107
1745
1798
17987
2229
233
2750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein; Helicase; Hydrolase; Polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12.3%;
29.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 346241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6K2 protein.
NIa-VPg protein.
NIa-protease protein.
Pl protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 es protein.

6K1 prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 83; DB 2;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coat protein.
HC-Pro protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NIb polymerase protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CI protein
                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E6019CBD1E80B59D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein.
                                                                                                                                      is a redox-active disulfide bond
                                 ้ผ
                                                                                                                                                                                                                                                                                                                                                                                                459
                                                                                                               pyridine
                                                                                                                                                                                                                                                                                                                                                                                              AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50;
                                                                                                                                                                                                                                                                                                              97-27
                                                                                                                                                                                                                                                                                                   Bacillus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 3063;
                                                                                                                nucleotide-disulfide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                            Han c
                                                                                                                                                                                                          n C., n..
s., Okinaka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20;
                                                                                                                                                                                                                                Hill K.,
                                                                                                                                                                                   NAD (+)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                     ₽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           63
                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
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                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                          PRINTS; PR00368; PADPUR. PRINTS; PR00368; PADPURASE.

PRINTS; PR00411; PUDRDTASEI.

PRINTS; PR00469; PUDRDTASEI.

PRODOM; PD000139; FAD DYT_redox; 1.

TIGRPAMS; TIGR01350; Ilpoamide DH; 1.

TIGRPAMS; TIGR01350; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.

PROSITE; PS00076; PYRIDINE REDOX 1; UNKNOWN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF02852; Pyr_redox_dim; PRINTS; PR00368; FADPNR.
256
                                       120
                                                                              203
                                                                                                                                                             144
                                                                                                                      60
                                                                                                                                                                                                  σı
                                                                                                                                                                                                                                                          Similarity
                                                                              ΑP
ANPEYV
                                   ANPOFI
                                                                                                             APFEVRLYKNKDMIQTLTNKSKIQNVGGTYELHVGDTIDLIFNSEHQVLKNNTYWGIILL
                                                                                                                                                         EPAELPFAPFDGKWILNSSHAMSLENIPK-SLLIVGGGVIGCEFASIYSRLGTKVTIVEM
                                                                                                                                                                                                EPCMAKFGPLPSKWOMASSEPPCVNKVSDWKLEILQNGLY----LIYGQVAPNANYNDV
                                                                          -QLLPGEDKDIAQIL--KEKLESDG--VEIFTGAALKGLNNYKKQA--SFEYKGSIQE
                                                                                                                                                                                                                                          Conservative
261
                                                                                                                                                                                                                                                          11.8%;
25.4%;
                                                                                                                                                                                                                                        25;
                                                                                                                                                                                                                                                          Score 79.5;
Pred. No. 3
                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                          33;
                                                                                                                                                                                                                                                                             DB
                                                                                                                                                                                                                                      56;
                                                                                                                                                                                                                                                                             2
                                                                                                                                                                                                                                                                           Length 459;
                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                       center
                                                                                                                                                                                                                                      13;
                                                                                                                                                                                                                                    Gaps
                                                                                                                  119
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202 59 9

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